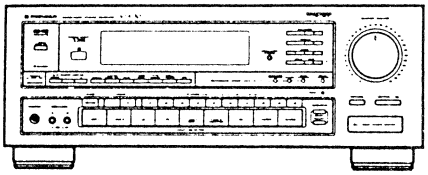
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
ARP2558

AUDIO/VIDEO STEREO RECEIVER

VSX-501
VSX-511S VSX-502
VSX-52

VSX-501, VSX-511S AND VSX-52 HAVE THE FOLLOWING :

Type	Model			Power Requirement	Remarks
	VSX-501	VSX-511S	VSX-52		
KU	○	○	○	AC120V only	
KC	—	○	—	AC120V only	
SD	○	—	—	AC110V, 120V-127V, 220V, 240V (Switchable)	

- This manual is applicable to the following : VSX-501/KU and SD ; VSX-511S/KU and KC ; VSX-52/KU.
- For the following : VSX-501/SD ; VSX-511S/KU and KC ; VSX-52/KU, refer to page 96.

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This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SAFETY INFORMATION

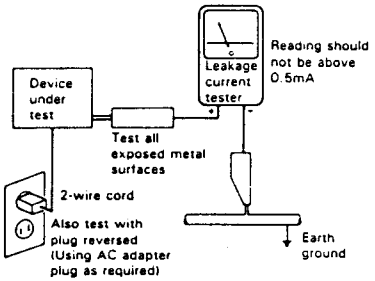
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
Device under test
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

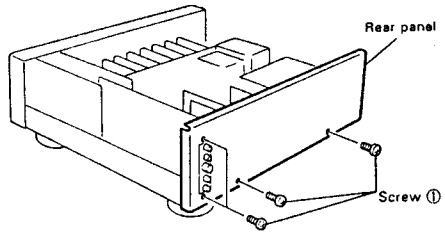
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

VSX-501, VSX-511S, VSX-52

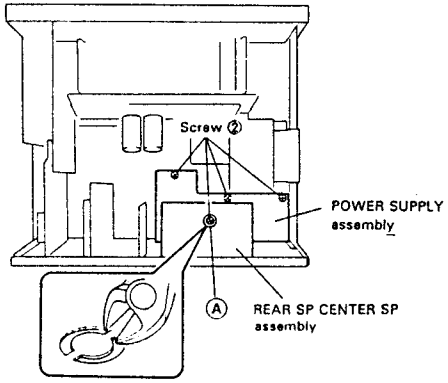
2. DISASSEMBLY

2.1 POWER SUPPLY ASSEMBLY

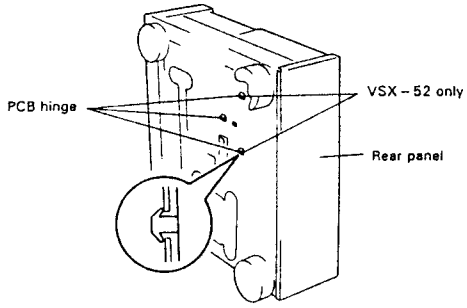
1. Remove the bonnet case (7 screws).
2. Remove the screws on the rear panel. (four screws ①).



3. Use nippers to cut at Ⓐ in the REAR SP CENTER SP assembly.
4. Remove the screws on the POWER SUPPLY assembly. (four screws ②)

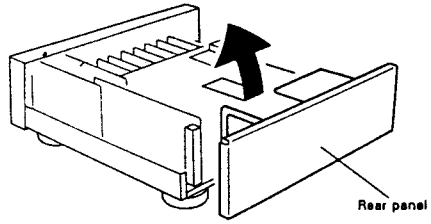


5. Stand the unit upright, and use fine-nosed pliers to press in the PCB hinge on the rear panel.



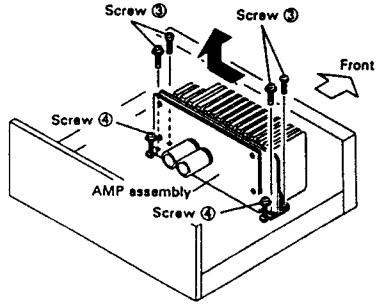
Note :
Avoid shorting the unit by using an insulation sheet or similar between transformer TP and other assemblies when positioning the unit securely.

6. Return the unit to its original position. Pull the rear panel toward the operator and securely place it so that the side with the POWER SUPPLY assembly buttons are visible.

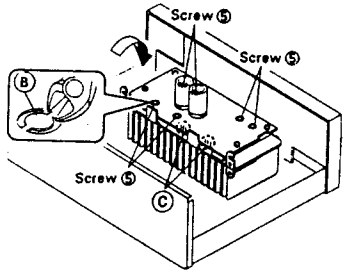


2.2 AMP ASSEMBLY

1. Remove the four heat sink locking screws ③ and loosen the two regular screws④.
2. Cut the binder with nippers.



3. Cut the AMP assembly at Ⓑ with nippers and then remove the six screws ⑤.
4. Remove the transistor solder at Ⓒ (two locations).



3. EXPLODED VIEWS, PACKING AND PARTS LIST

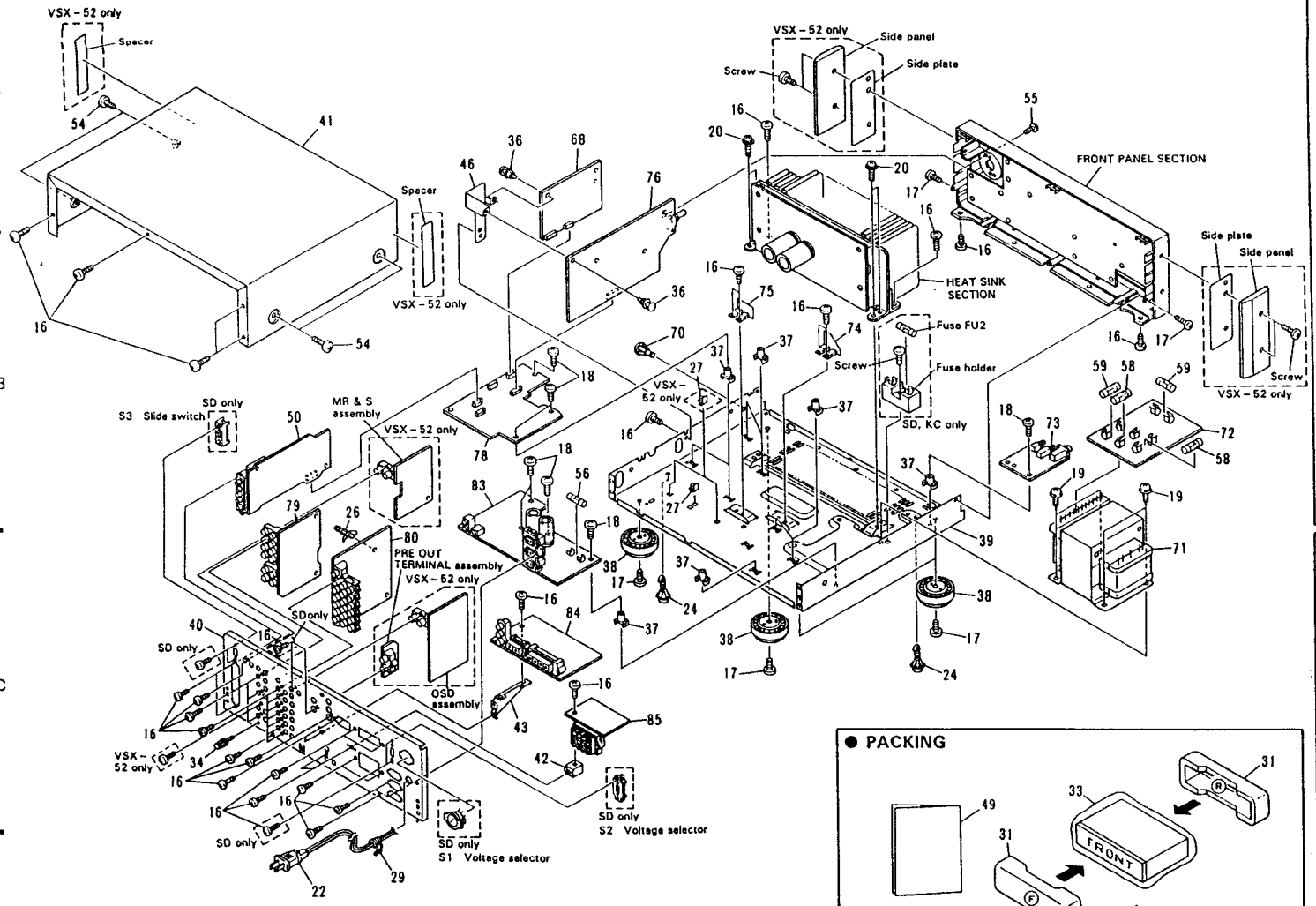
NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Exterior and Packing

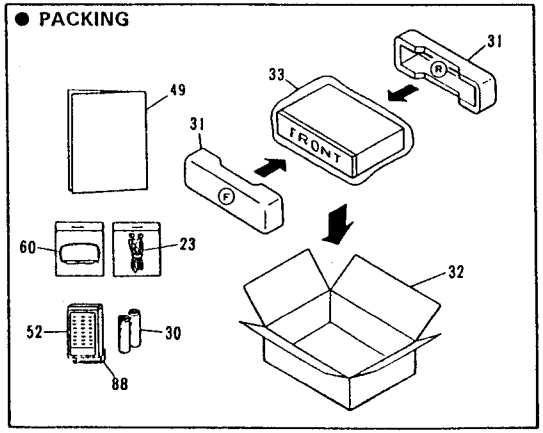
Mark	No.	Description	Parts No.
	1	MASTER VOL ASSY	AAB1207
	2	KIN BUTTON	AAD1609
	3	M&S KNOB	AAD1997
	4	SP BUTTON (PLS)	AAD2211
	5	MUTE BUTTON (PLS)	AAD2264
	6	ACOUSTIC BUTTON (PLS)	AAD2265
	7	FUNCTION BUTTON L	AAD2268
	8	FUNCTION BUTTON R	AAD2269
	9	TX FUNCTION BUTTON	AAD2270
	10	BUTTON (PLS)	AAD2279
	11	POWER BUTTON (PLS)	AAD2272
	12	KURO BUTTON	AAD2274
	13	DISPLAY PANEL	AAK2324
	14	SASH (PLS)	AAK2298
	15	NAME PLATE (METAL)	AAM1029
	16	SCREW	ABA-298
	17	SCREW (STEEL)	ABA1009
	18	SCREW	ABA1018
	19	SCREW (STEEL)	ABA1053
	20	SCREW	ABA1054
	21	SCREW	ABA1082
⚠	22	AC POWER CORD	ADG1058
	23	FM ANTENNA	ADH1004
NSP	24	PCB HOLDER	AEC1097
	25	MICA SHEET	AEC1140
NSP	26	PCB SUPPORT	AEC1215
NSP	27	PCB HINGE	AEC1407
	28	MICA SHEET	AEE1014
⚠	29	STRAIN RELIEF	AEP-113
NSP	30	BATTERY (R03, AAA)	AEX-021
	31	FRONT REAR PAD	AHA1503
	32	PACKING CASE	AHD2285
	33	PACKING SHEET	AHG1021
NSP	34	TERMINAL SCREW	AKE-031
	35	FRONT PANEL	AMB1987
	36	RIVET (PLASTIC)	AMR1066
NSP	37	PCB MOULD	AMR1525
	38	FOOT	AMR2414
NSP	39	CHASSIS	ANA1178
NSP	40	REAR PANEL	ANC1893
	41	METAL BONNET (MTL)	ANE1374
NSP	42	PCB HOLDER	ANG-502
NSP	43	PCB HOLDER A	ANG-516
NSP	44	SUB TRANS HOLDER	ANG1393
NSP	45	POWER ASSEMBLY HOLDER -F	ANG1575
NSP	46	PCB HOLDER	ANG1670
NSP	47	POWER ASSEMBLY HOLDER -R	ANG1683
NSP	48	HEAT SINK	ANH1398
	49	OPE. INSTRUCTIONS (ENGLISH)	ARB1378
◉	50	TUNER ASSEMBLY	AWE1140
◉	51	FL. U-COM ASSY	AWK1556
	52	REMOTE CONTROL UNIT (CU-VSX046)	AXD1263
	53	SCREW	BPZ26P080FMC
	54	SCREW	FBT40P060FZK
	55	SCREW	VMZ30P060FCU
⚠	56	FUSE (8A, FU1)	AEK1002
	57	.....	
⚠	58	FUSE (4A, FU3, 4)	AEK-125
⚠	59	FUSE (1.25A, FU5, 6)	AEK-120
	60	LOOP ANTENNA (L)	ATB1005
⚠	61	TRANSISTOR (Q1)	2SC3281
⚠	62	POWER TRANSISTOR (Q10)	2SA1803
⚠	63	TRANSISTOR (Q2)	2SC3281
⚠	64	TRANSISTOR (Q3)	2SA1302
⚠	65	TRANSISTOR (Q4)	2SA1302
⚠	66	TRANSISTOR (Q5)	2SC3182N
⚠	67	TRANSISTOR (Q6)	2SA1265N
	68	DOL. PRO. MOD ASSEMBLY	AXQ1009
⚠	69	POWER TRANSISTOR (Q8)	2SC4688
NSP	70	PCB SPACER	AEC1072
⚠	71	POWER TRANSFORMER (T1)	ATS1424
NSP	72	TRANS TERMINAL ASSEMBLY	AWZ4268
◉	73	SP SW ASSEMBLY	AWZ4262
◉	74	REG (5.6V) ASSEMBLY	AWZ4267
◉	75	REG (12V) ASSEMBLY	AWZ4266
◉	76	VOLUME ASSEMBLY	AWZ4269
	77	.....	
◉	78	CONNECTION ASSEMBLY	AWZ4265
◉	79	AUDIO FUNCTION ASSEMBLY	AWZ4263
◉	80	A/V FUNCTION ASSEMBLY	AWZ4264
	81	.....	
	82	.....	
◉	83	POWER SUPPLY ASSEMBLY	AWZ4255
◉	84	REAR SP CENTER SP ASSEMBLY	AWZ4256
NSP	85	FRONT SP ASSEMBLY	AWZ4257
◉	86	AMP ASSEMBLY	AWZ4254
NSP	87	PCB HOLDER	ANG1726
	88	BATTERY COVER	PZN1001

● EXTERIOR

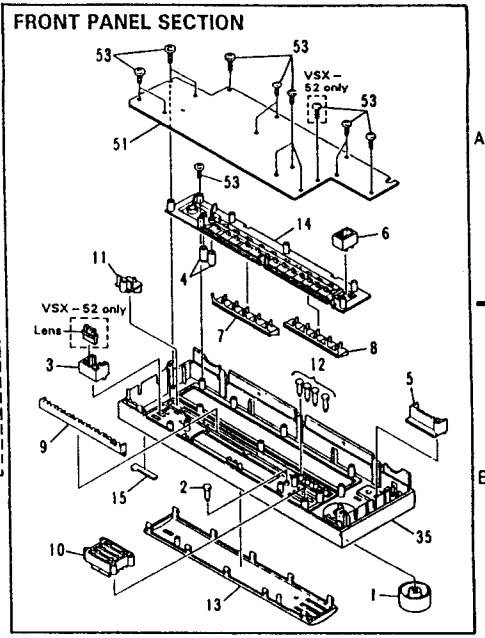


NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

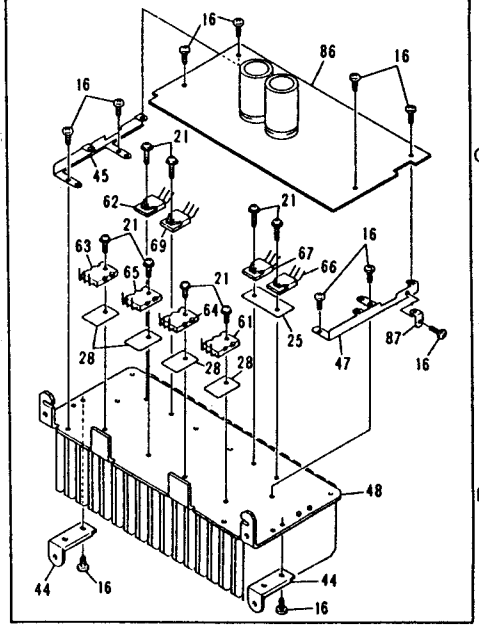
● PACKING



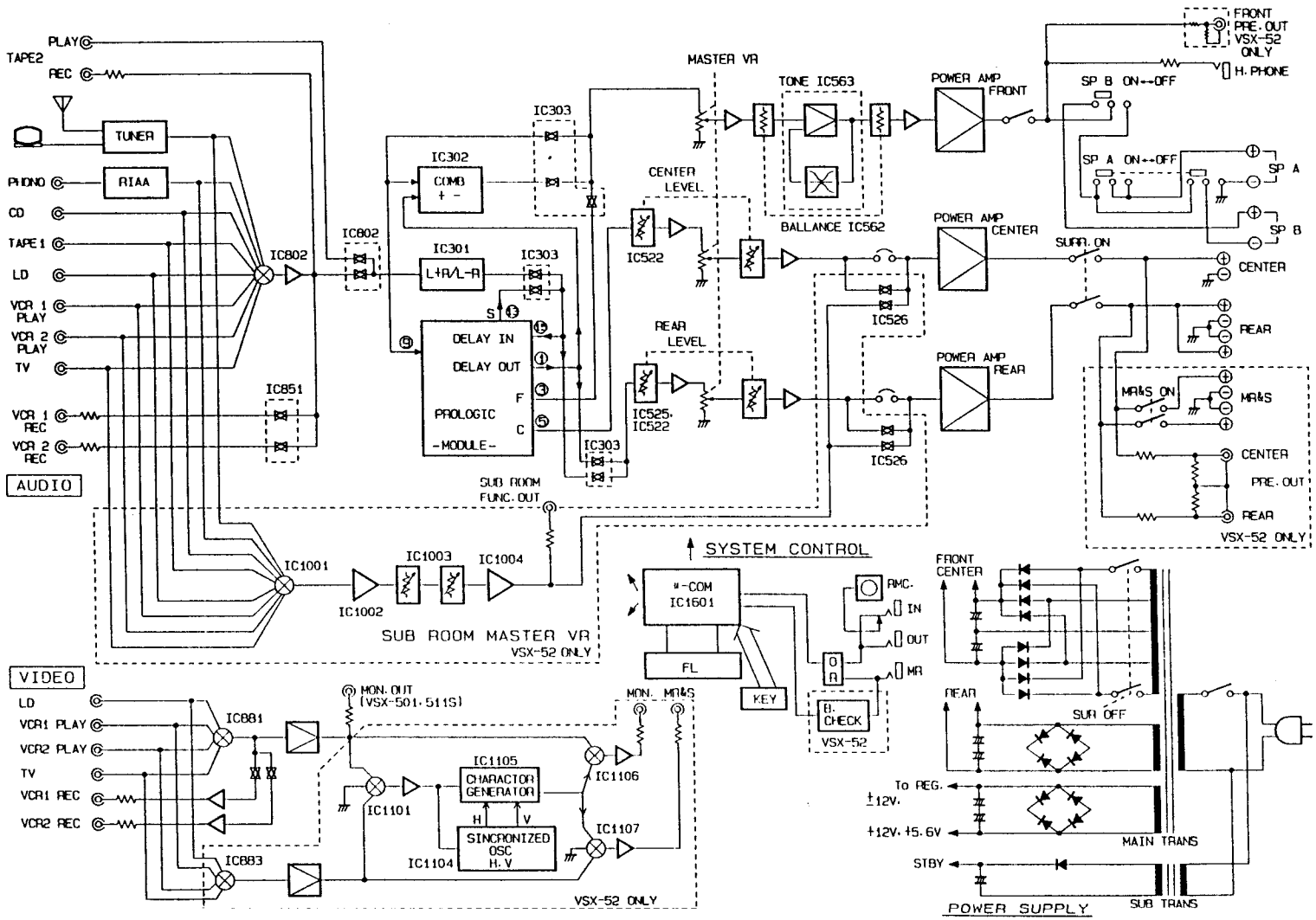
FRONT PANEL SECTION



HEAT SINK SECTION



4. BLOCK DIAGRAM



5. SCHEMATIC AND PCB CONNECTIONS DIAGRAMS

5.1 OVERALL SCHEMATIC DIAGRAM

Note: (Type 1)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭V : Signal voltage at rated output.
   ▭ : DC voltage (V) at no input signal unless otherwise noted. Value in ( ) is DC voltage at rated power.
   ⇨ mA or ⇦ mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ➡ : Signal route.
   - ⊘ : Adjusting point.
   - ▼ (Red) : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES** (Underline indicates switch position):

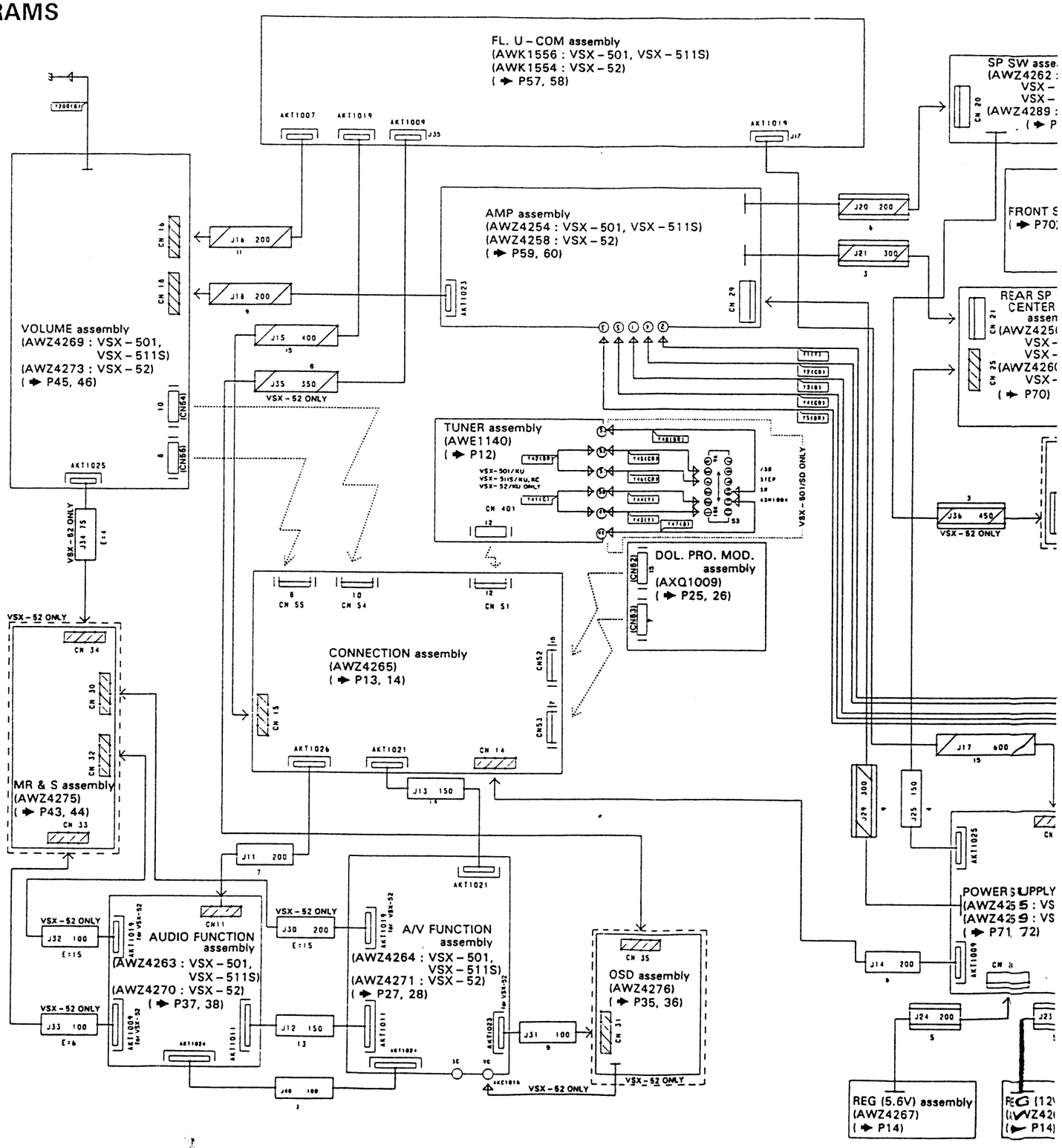
S1	LINE VOLTAGE SELECTOR (VSX – 501/SD ONLY) AC110V/120 – 127V/220V/240V
S2	LINE VOLTAGE SELECTOR (VSX – 501/SD ONLY) AC110 – 127V/220 – 240V
S3	CH. STEP (VSX – 501/SD ONLY) 9kHz – 10kHz

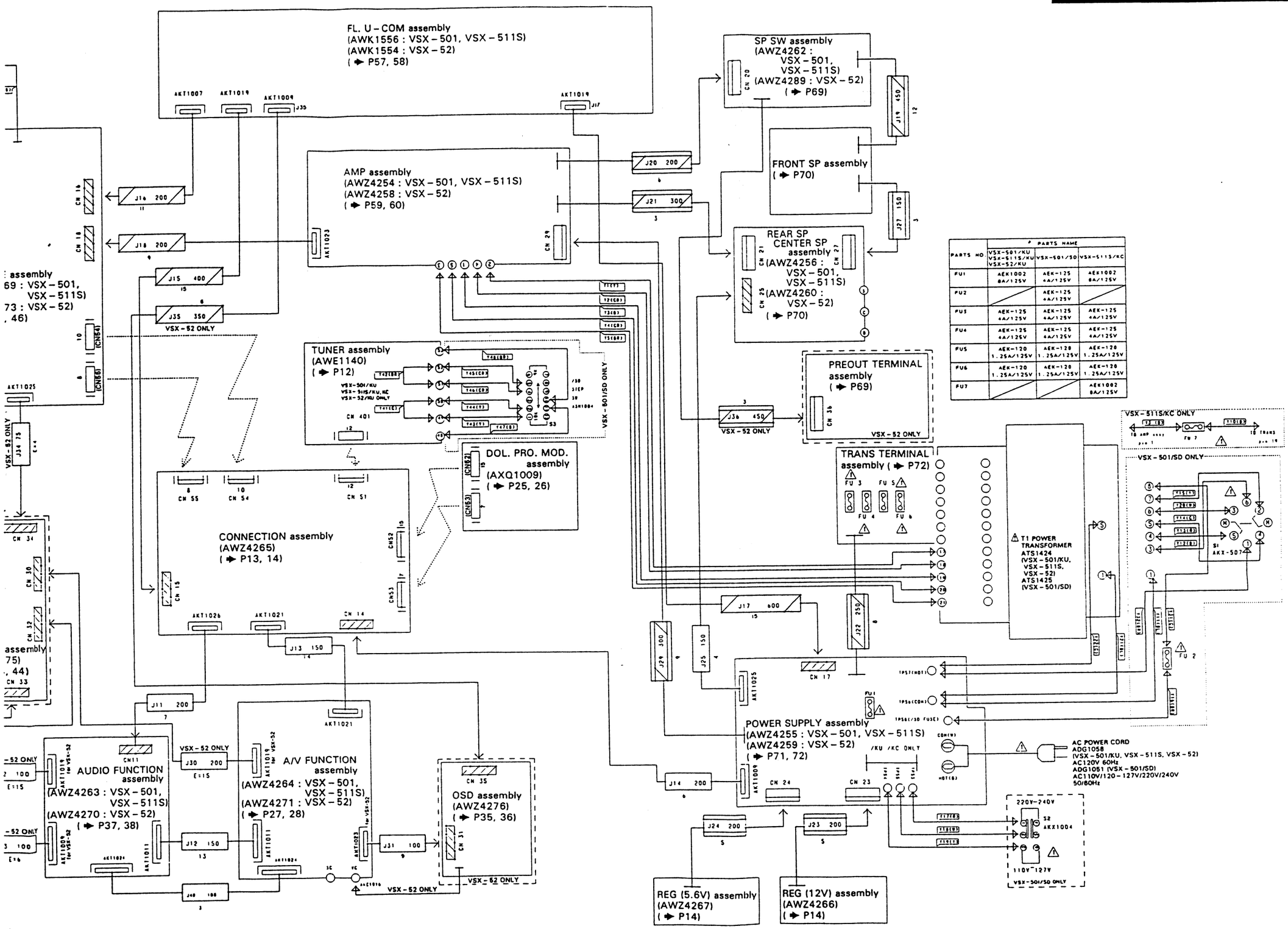
FL. U – COM assembly

S601	SIMULATED STEREO
S602	OSD SELECT (VSX – 52 ONLY)
S603	POWER
S604	ASC MEMORY
S605	SIMULATED SURR.
S606	VIDEO SELECTOR
S607	BAND
S608	ASC 1
S609	STUDIO
S610	MR & S (VSX – 52 ONLY)
S611	TUNING DOWN
S612	ASC 2
S613	EFECT DOWN
S614	VCR 1
S615	TUNING UP
S616	MEMORY
S617	BASS DOWN
S618	VCR 2
S619	1
S620	CUSTOM SELECT
S621	TREBLE DOWN
S622	LD
S623	2
S624	SCAN
S625	PROLOGIC
S626	TV
S627	3
S628	AUTO MONO
S629	BALANCE LCH
S631	4
S632	AUTO MANUAL
S633	EFECT UP
S634	TAPE 1/DAT
S635	5
S636	DIRECT ACCESS
S637	BASS UP
S638	TAPE 2/MONITOR
S639	6
S640	HITS
S641	3CH LOGIC
S642	CD
S643	7
S645	TREBLE UP
S646	TUNER
S647	8
S649	BALANCE RCH
S650	PHONO
S651	9
S653	RETURN
S654	ACOUSTIC SELECT
S655	0
S657	MUTING
S658	ACOUSTIC MEMORY
S659	RESET

SP SW assembly

S251	SP – A ON/OFF
	SP – B ON/OFF

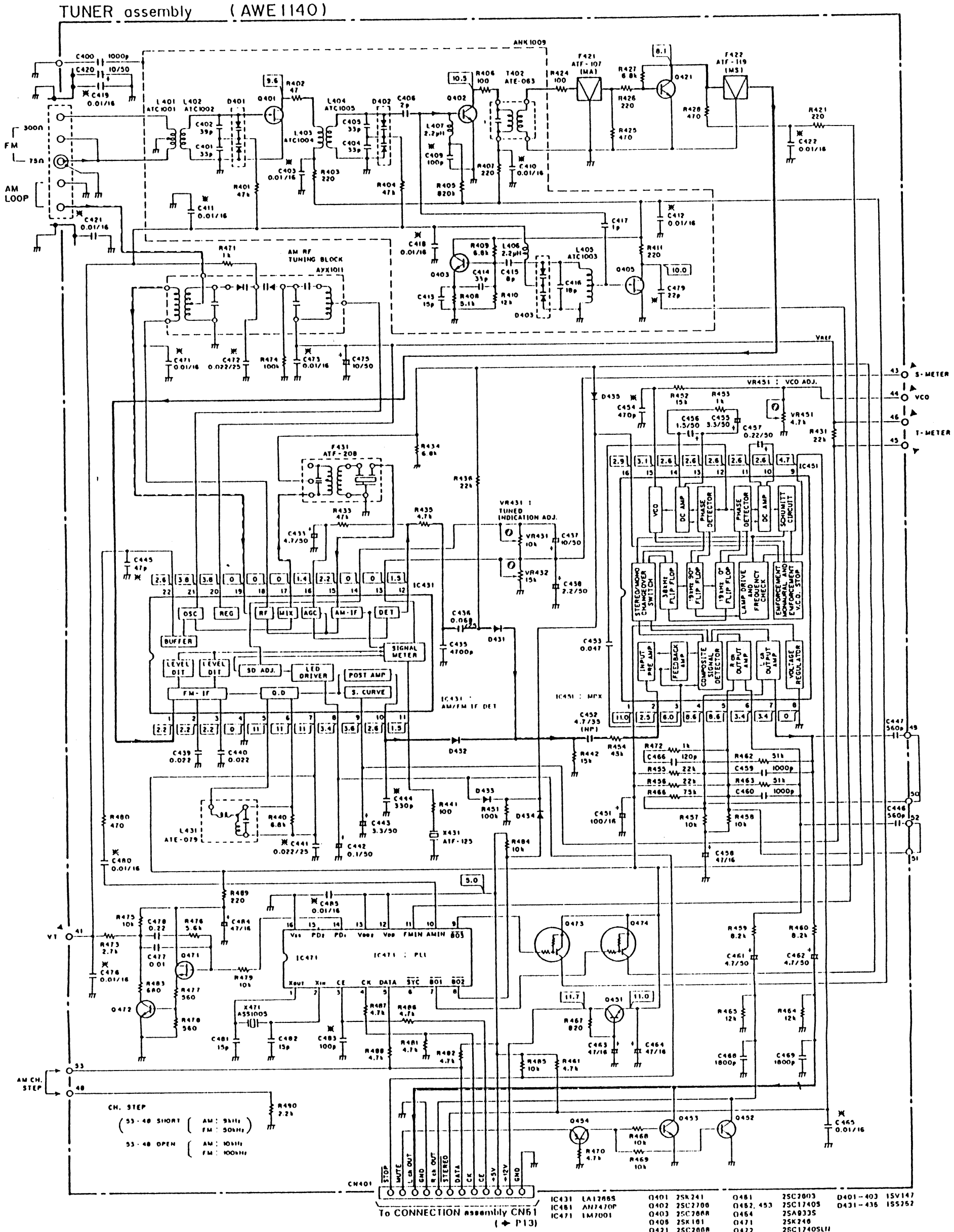


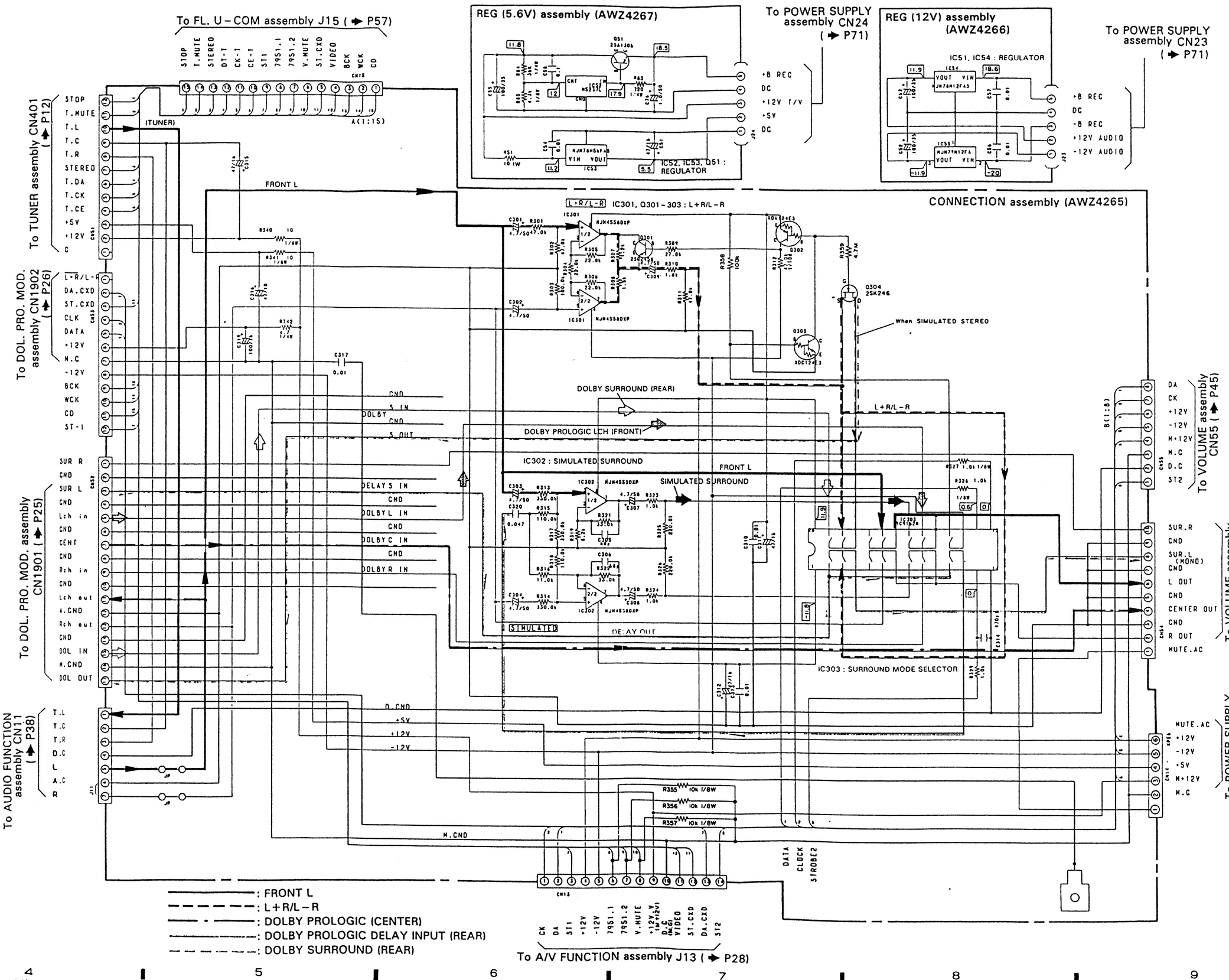


PARTS NO.	* PARTS NAME		
	VSX-501/KU VSX-511S/KU VSX-52/KU	VSX-501/SD	VSX-511S/KC
FU1	AEK1002 8A/125V	AEK-125 4A/125V	AEK1002 8A/125V
FU2		AEK-125 4A/125V	
FU3	AEK-125 4A/125V	AEK-125 4A/125V	AEK-125 4A/125V
FU4	AEK-125 4A/125V	AEK-125 4A/125V	AEK-125 4A/125V
FU5	AEK-120 1.25A/125V	AEK-120 1.25A/125V	AEK-120 1.25A/125V
FU6	AEK-120 1.25A/125V	AEK-120 1.25A/125V	AEK-120 1.25A/125V
FU7			AEK1002 8A/125V

5.2 TUNER ASSEMBLY, CONNECTION ASSEMBLY, REG (12V) ASSEMBLY AND REG (5.6V) ASSEMBLY

TUNER assembly (AWE1140)




To FL. U-COM assembly J15 (➡ P57)
STOP
T.MUTE
STEREO
DT-1
CK-1
CE-1
ST1
7951.1
7951.2
V.MUTE
ST.CXD
VIDEO
BCK
WCK
CD
CN15
A(1:15)
To TUNER assembly CN401 (➡ P12)
(TUNER)
T.L
T.C
T.R
DA
CK
+5V
+12V
G
REG (5.6V) assembly (AWZ4267)
+B REG
DC
+12V T/V
+5V
DC
To POWER SUPPLY assembly CN24 (➡ P71)
REG (12V) assembly (AWZ4266)
IC51, IC54 : REGULATOR
+B REG
DC
-B REG
+12V AUDIO
-12V AUDIO
To POWER SUPPLY assembly CN23 (➡ P71)
IC52, IC53, Q51 : REGULATOR
CONNECTION assembly (AWZ4265)
FRONT L
L+R/L-R
IC301, Q301-303 : L+R/L-R
IC301
NJM4558DXP
Q301
Q302
Q303
0304 2SK246
When SIMULATED STEREO
DOLBY SURROUND (REAR)
L+R/L-R
DOLBY PROLOGIC LCH (FRONT)
IC302 : SIMULATED SURROUND
FRONT L
SIMULATED SURROUND
IC302
SIMULATED
DELAY OUT
IC303 : SURROUND MODE SELECTOR
To DOL. PRO. MOD. assembly CN1902 (➡ P26)
L+R/L-R
DA.CXD
ST.CXD
CLK
DATA
+12V
M.C
-12V
BCK
WCK
CD
ST-1
To DOL. PRO. MOD. assembly CN1901 (➡ P25)
SUR R
GND
SUR L
Lch in
CENT
Rch in
Lch out
A.GND
Rch out
DOL IN
M.GND
DOL OUT
To AUDIO FUNCTION assembly CN11 (➡ P38)
T.L
T.C
T.R
D.C
L
A.C
R
DOLBY
S IN
S OUT
DELAY S IN
DOLBY L IN
DOLBY C IN
DOLBY R IN
D.GND
+5V
+12V
-12V
M.GND
R355 10k 1/8W
R356 10k 1/8W
R357 10k 1/8W
CN13
DATA
CLOCK
STROBE2
To A/V FUNCTION assembly J13 (➡ P28)
CK
DA
ST1
+12V
-12V
7951.1
7951.2
V.MUTE
+12V(+8V)
D.C
VIDEO
ST.CXD
DA.CXD
ST2
To VOLUME assembly CN55 (➡ P45)
DA
CK
+12V
-12V
M+12V
M.C
D.C
ST2
To VOLUME assembly CN54 (➡ P45)
SUR.R
GND
SUR.L (MONO)
GND
L OUT
GND
CENTER OUT
GND
R OUT
MUTE.AC
To POWER SUPPLY assembly J14 (➡ P71)
MUTE.AC
+12V
-12V
+5V
M+12V
M.C
: FRONT L
: L+R/L-R
: DOLBY PROLOGIC (CENTER)
: DOLBY PROLOGIC DELAY INPUT (REAR)
: DOLBY SURROUND (REAR)

This P. C. B connection diagram is viewed from the parts mounted side.

To POWER SUPPLY assembly CN23 (➡ P74)

To POWER SUPPLY assembly CN24 (➡ P74)

To DOL. PRO. MOD. assen

To VOLUME assembly CN55 (➡ P48)

VSX-501/SD ONLY

5kHz 10kHz

REG (12V) ASSEMBLY (AWZ4266)

REG (5.6V) ASSEMBLY (AWZ4267)

CONNECTION ASSEMBLY (AWZ4265)

VSX-52 ONLY

VSX-52 ONLY

TUNER ASSEMBLY (AWE1140)

To POWER

To A/V FUNCTION assen bly

This P. C. B connection diagram is viewed from the parts mounted side.

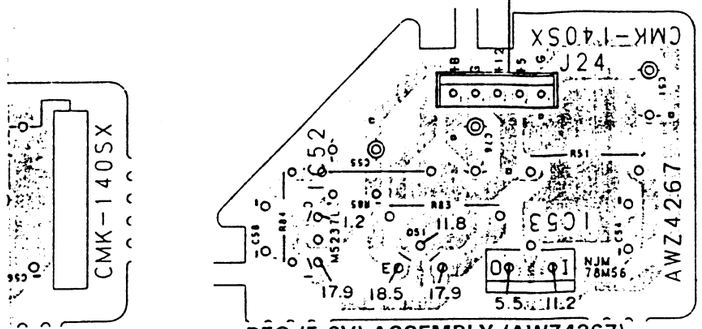
)WER SUPPLY assembly CN24 (➡ P74)

To DOL. PRO. MOD. assembly CN1902 (➡ P23)

To DOL. PRO. MOD. assembly CN1901 (➡ P23)

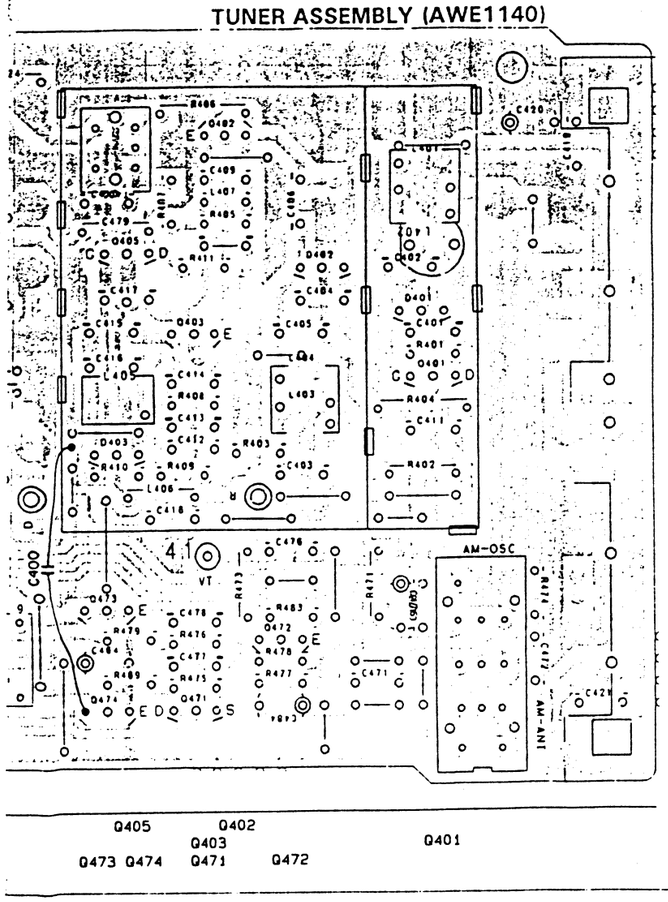
To VOLUME assembly CN55 (➡ P48)

CONNECTION ASSEMBLY (AWZ4265)



REG (5.6V) ASSEMBLY (AWZ4267)

TUNER ASSEMBLY (AWE1140)



To VOLUME assembly CN54 (➡ P48)

To AUDIO FUNCTION assembly CN11 (➡ P39)

To FL. U-COM assembly J15 (➡ P56)

To POWER SUPPLY assembly J14 (➡ P74)

To A/V FUNCTION assembly J13 (➡ P29)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding mating symbols listed on the following table.
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E, B, C are all shown, the emitter.

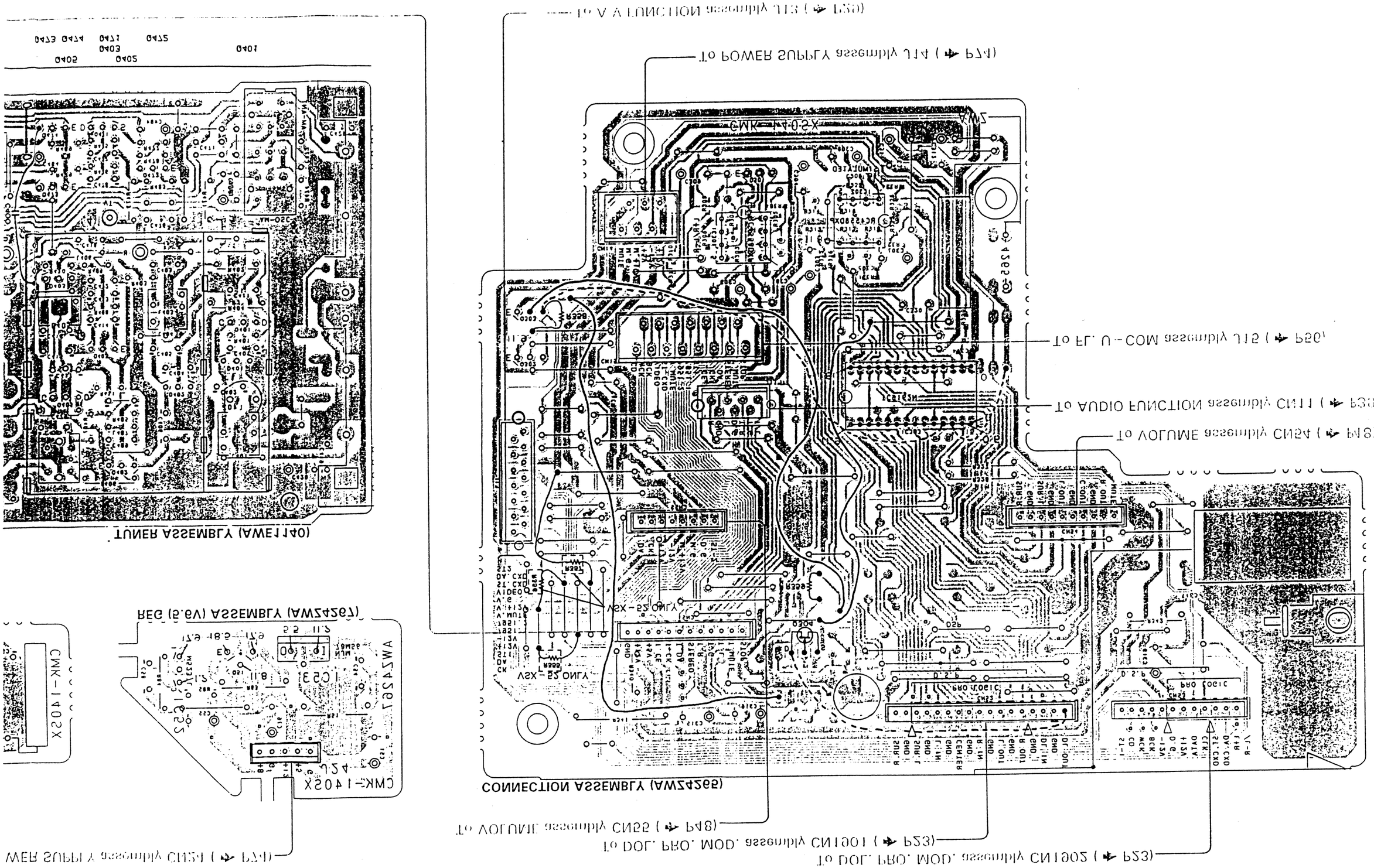
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q304	Q304	Transistor
R319	R319	Resistor, trimmer potentiometer
D203	D203	Diode
R237	R237	Resistor
C313	C313	Capacitor (Polarized)
C304	C304	Capacitor (Non-polarized)

Others

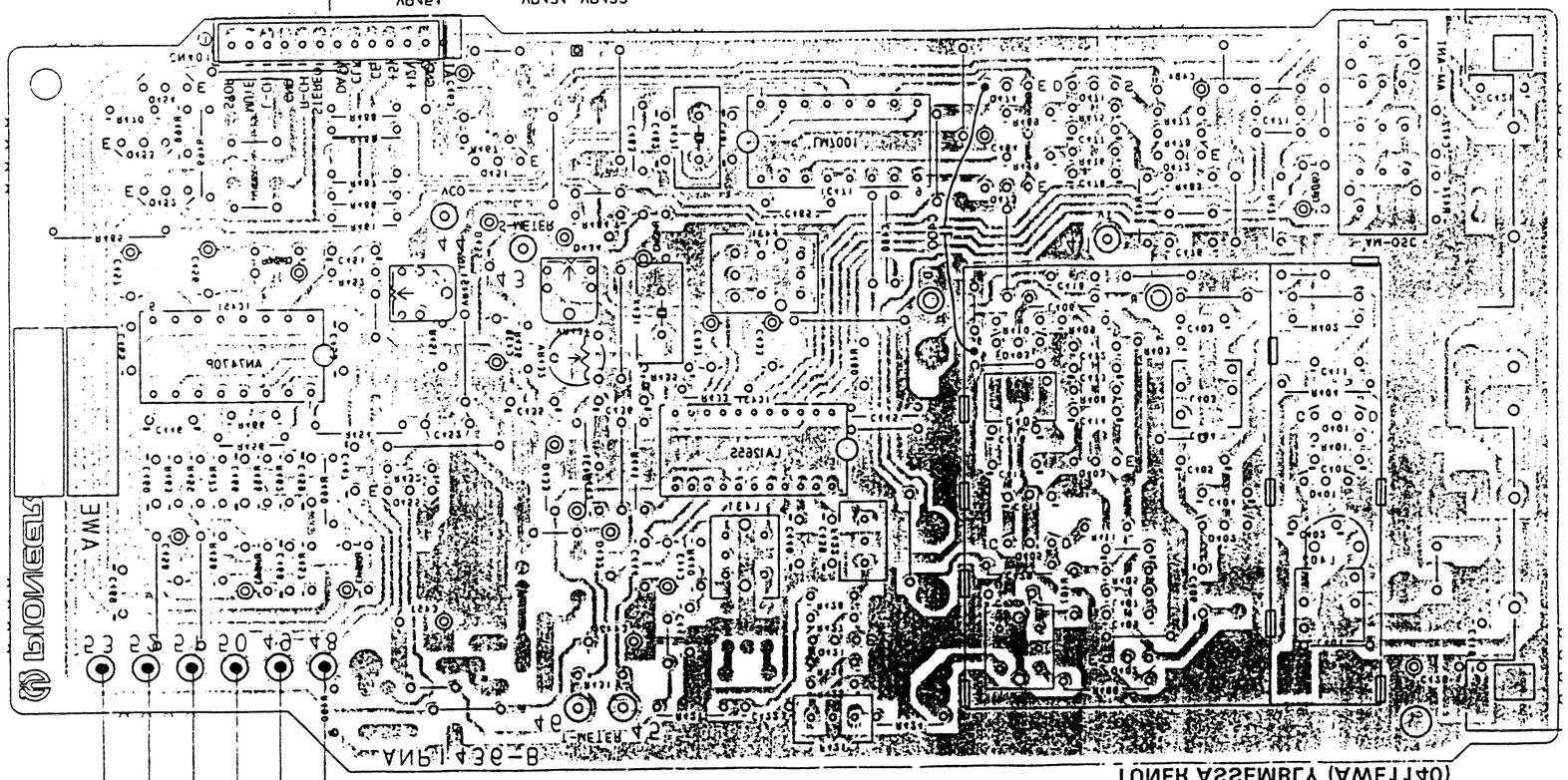
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols ⊞ ⊞ (Fast Operating Fuse) and/or ⊞ ⊞ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ⊞ ⊞ (Fusible de type rapide) et/ou ⊞ ⊞ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.


CONNECTION ASSEMBLY (AWZ4268)
TUNER ASSEMBLY (AWF1140)
REG. (2.9V) ASSEMBLY (AWZ4267)
CMK-1402X
X2041-CMK
To POWER SUPPLY assembly CN14 (P74)
To A.F.DIRECT assembly CN13 (P50)
To EL. U-COM assembly CN2 (P50)
To AUDIO FUNCTION assembly CN11 (P53)
To VOLUME assembly CN24 (P48)
To DOL. PRO. MOD. assembly CN1302 (P53)
To DOL. PRO. MOD. assembly CN1301 (P53)
To VOLUME assembly CN22 (P48)
To POWER SUPPLY assembly CN51 (P74)

This P. C. B. connection diagram is viewed from the foil side.

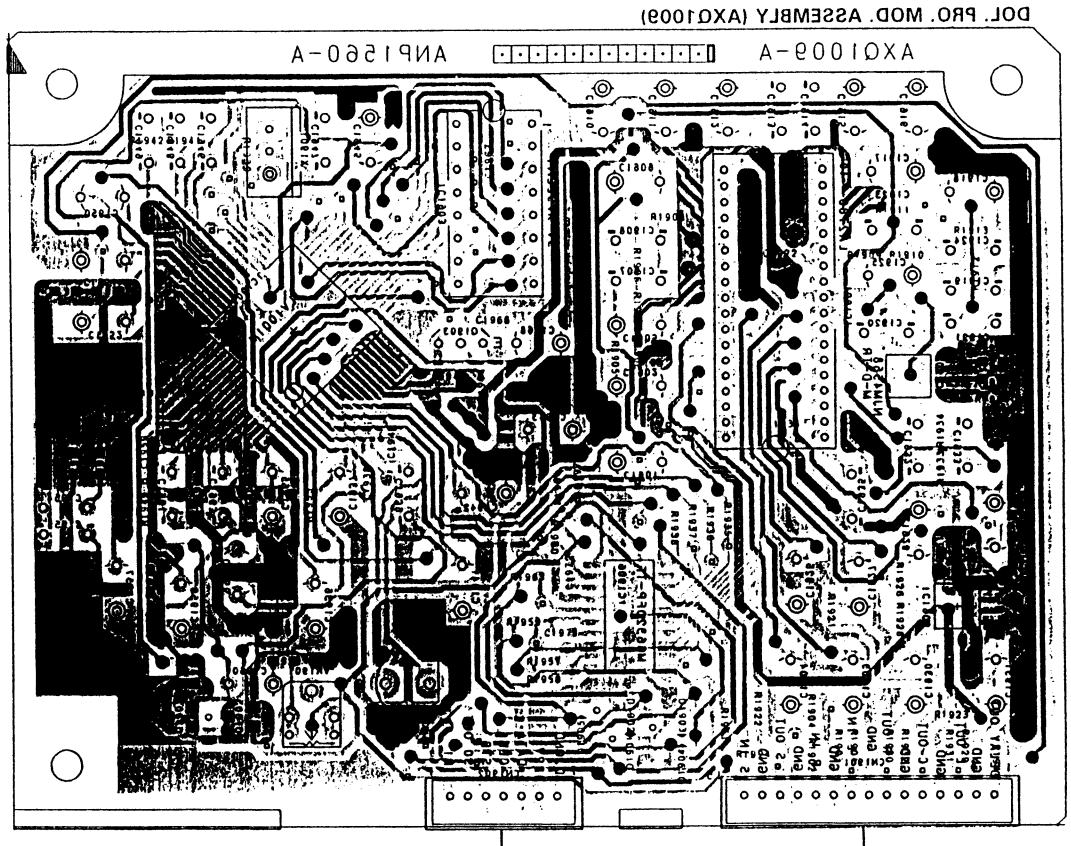

TUNER ASSEMBLY (AWF1140)
ANT 1 ANT 2 METER
TO POWER SUPPLY assembly CN53 (➡ P74)
REG (12V) ASSEMBLY (AWZ4566)
CNK-1405X
TO POWER SUPPLY assembly CN54 (➡ P74)
REG (8.7V) ASSEMBLY (AWZ4567)
CNK-1405X
TO VOLUME assembly CN55 (➡ P48)
TO DOL. PRO. MOD. assembly
CONNECTION ASSEMBLY (AWZ4568)
VFX-25 ONLY
VSX-50/D50 ONLY

This P. C. B. connection diagram is viewed from the foil side.

5.3 DOL. PRO. MOD. ASSEMBLY

This P. C. B. connection diagram is viewed from the foil side.

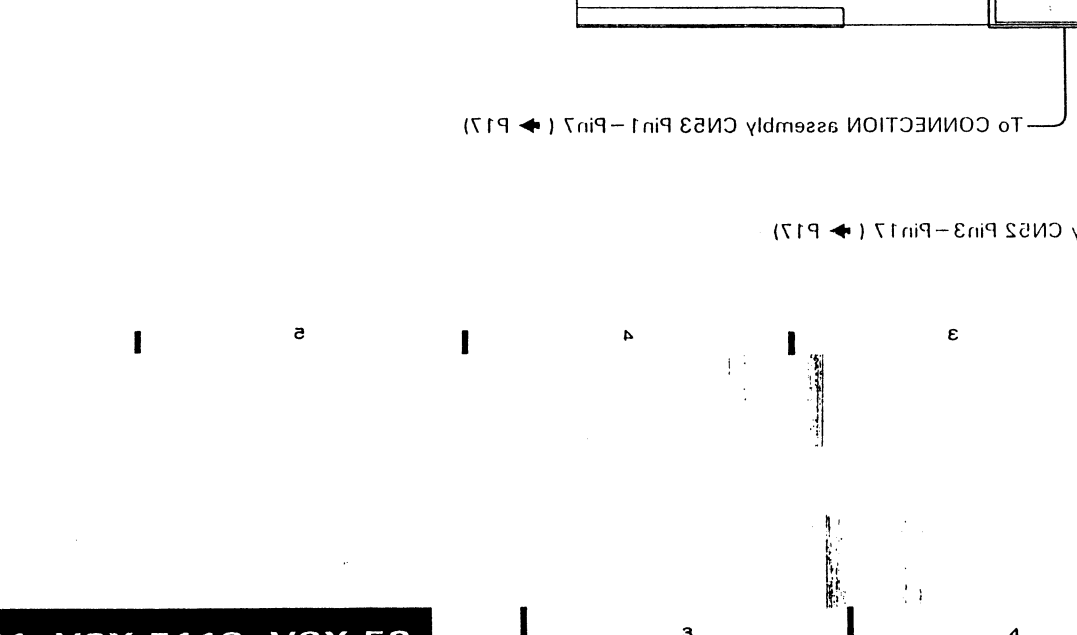
DOL. PRO. MOD. ASSEMBLY (AXQ1009)



VSX-501, VSX-511S, VSX-52

This P. C. B connection diagram is viewed from the parts mounted side.

DOL. PRO. MOD. ASSEMBLY (AXQ1009)



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ◎(double circles) shows negative terminal.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 (E)	or	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarized)
C518		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols -▮▮- (Fast Operating Fuse) and/or -▮▮- (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible -▮▮- (Fusible de type rapide) et/ou -▮▮- (Fusible de type lent) Indiquent que les pièces de remplacement doivent avoir la même désignation.

: FRONT Lch
: DOLBY PROLOGIC (CENTER)
: DOLBY SURROUND (REAR)
: DOLBY SURROUND DELAY (REAR)

DOL. PRO. MOD. assembly (AXQ1009)

IC1902 : TIME LINK DELAY

IC1903 : D-RAM

VR1901 : DOLBY LEVEL ADJ.

IC1906 : PORT EXPANDER

IC1901 : DOLBY PROLOGIC

DELAY TIME

S8	S4	S2	S1	SHORT MODE
0	0	0	0	20.4ms
0	0	0	1	30.7ms
0	0	1	0	28.7ms
0	0	1	1	26.6ms
0	1	0	0	24.6ms
0	1	0	1	22.5ms
0	1	1	0	20.5ms
0	1	1	1	18.4ms
1	0	0	0	16.4ms
1	0	1	1	14.3ms
1	0	1	0	12.3ms
1	0	0	1	10.2ms
1	1	0	0	8.2ms
1	1	1	1	6.1ms
1	1	1	0	4.1ms
1	1	1	1	2.0ms

NOISE MODE1	NOISE MODE2	
H	H	3ch
H	L	4ch
L	H	4ch
L	L	NOISE

NOISE ch.SEL.1	AUTO BALANCE
H	ON
L	OFF
NOISE ch.SEL.2	AUTO BALANCE
H	ON
L	Test Mode

(* 3.4ch MODE)

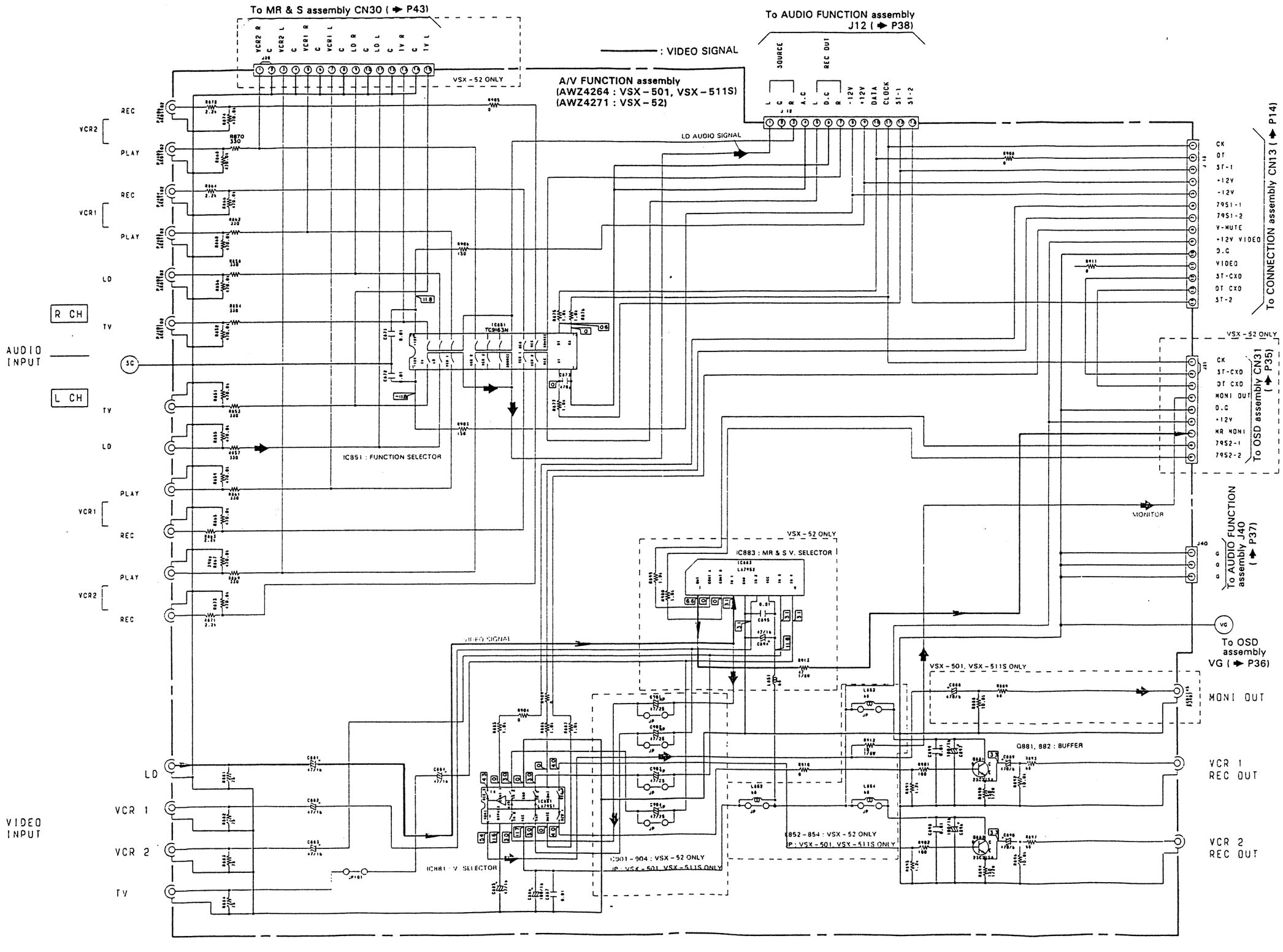
CENTER MODE1	CENTER MODE2	
L	L	NORMAL
L	H	WIDE
H	L	PHANTOM
H	H	OFF

(* 3.4ch MODE)

NOISE ch.SEL.1	NOISE ch.SEL.2	ch
L	L	Lch
L	H	Cch
H	L	Rch
H	H	Sch

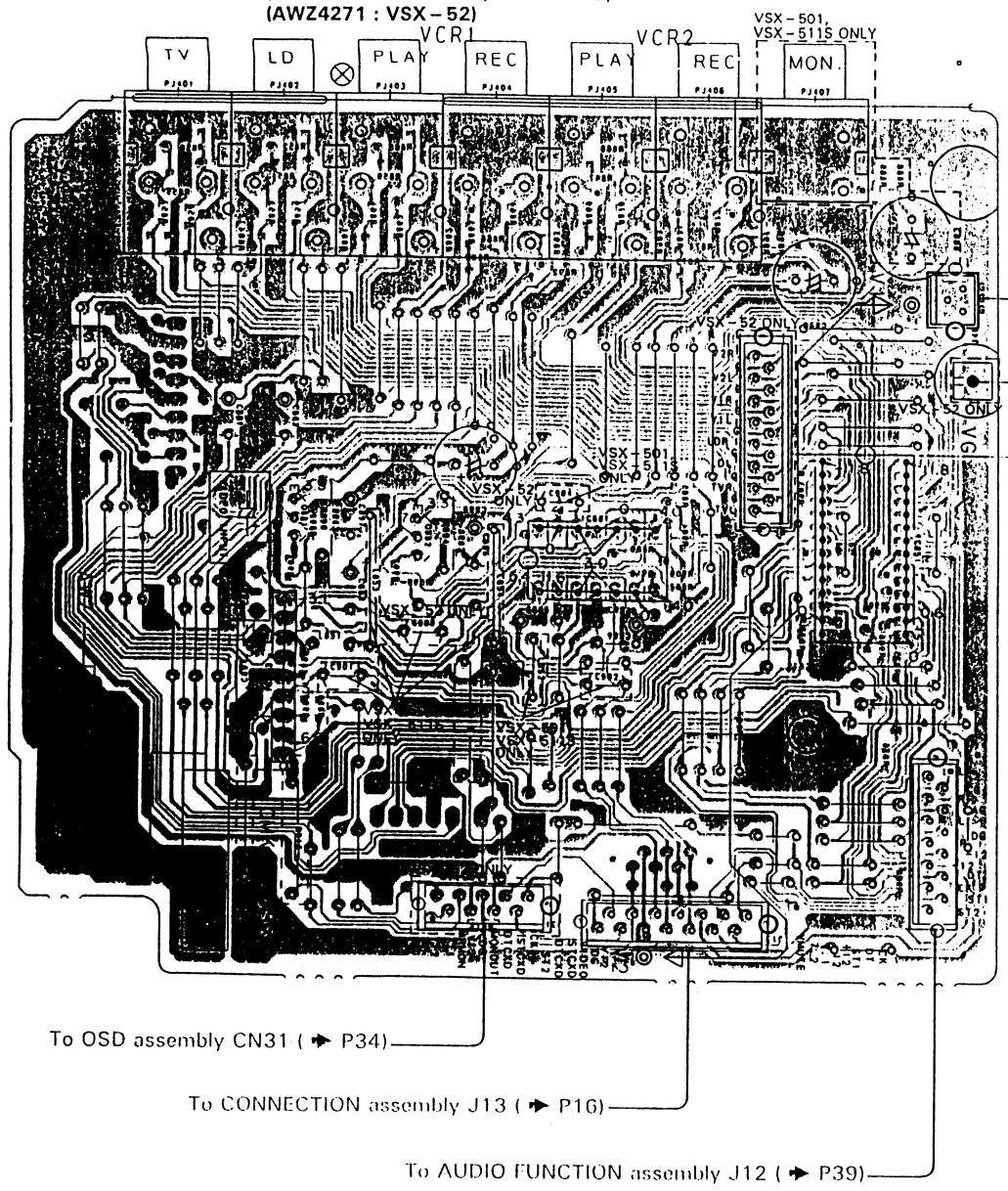
(* NOISE MODE)

5.4 A/V FUNCTION ASSEMBLY



A/V FUNCTION ASSEMBLY (AWZ4264 : VSX-501, VSX-511S)
(AWZ4271 : VSX-52)

This P. C. B connection diagram is viewed from the parts mounted side.



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E C B	E C B or E C B	Transistor
Q215 E C B	E C B	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarized)
C516		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

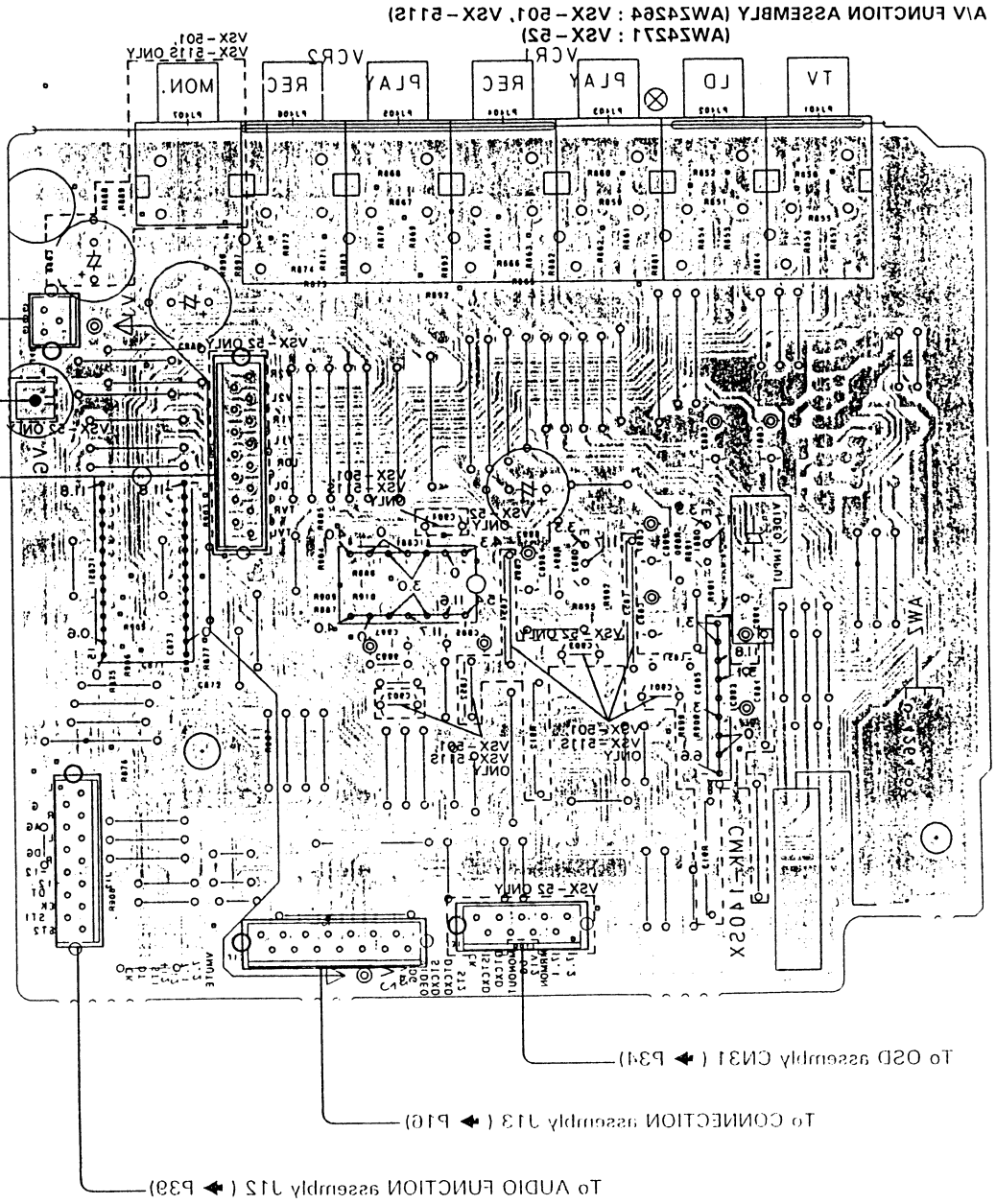
(FOR CANADIAN MODEL ONLY)
Fuse symbols ▮⊟▮ (Fast Operating Fuse) and/or ▮⊟▮ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▮⊟▮ (Fusible de type rapide) et/ou ▮⊟▮ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

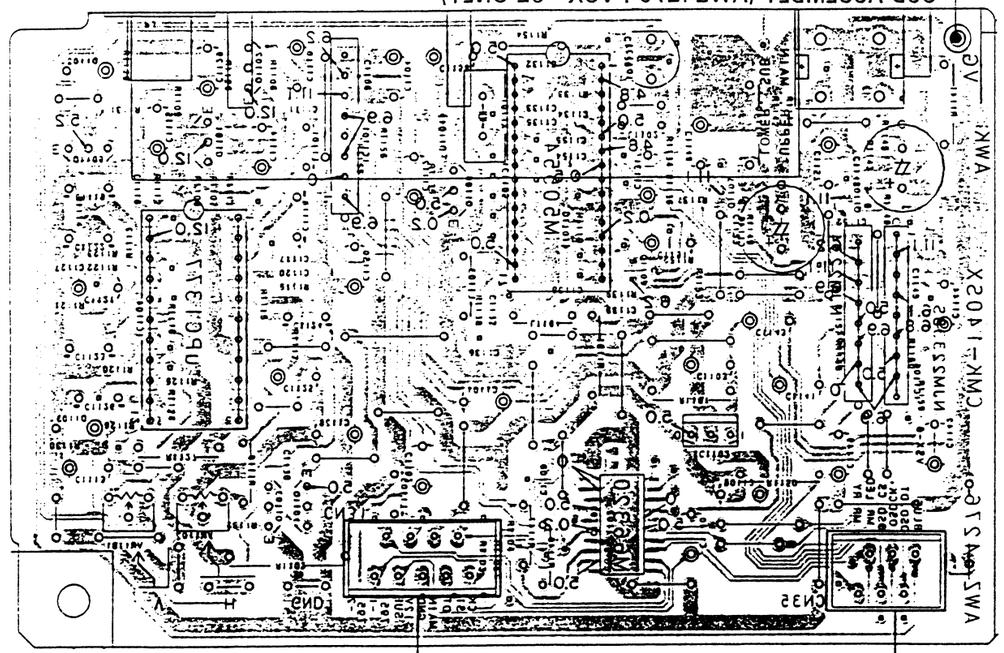
VSX-501, VSX-511S, VSX-52

This P. C. B. connection diagram is viewed from the foil side.

A/V FUNCTION ASSEMBLY (AWZ4264 : VSX-501, VSX-511S)
(AWZ4271 : VSX-52)



5.5 OSD ASSEMBLY



This P. C. B. connection diagram is viewed from the foil side.

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ◎(double circles) shows negative terminal.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E C B	Q504 or Q504 E C B	Transistor
Q215 C B E	Q215 or Q215	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarized)
C518	C518	Capacitor (Non-polarized)

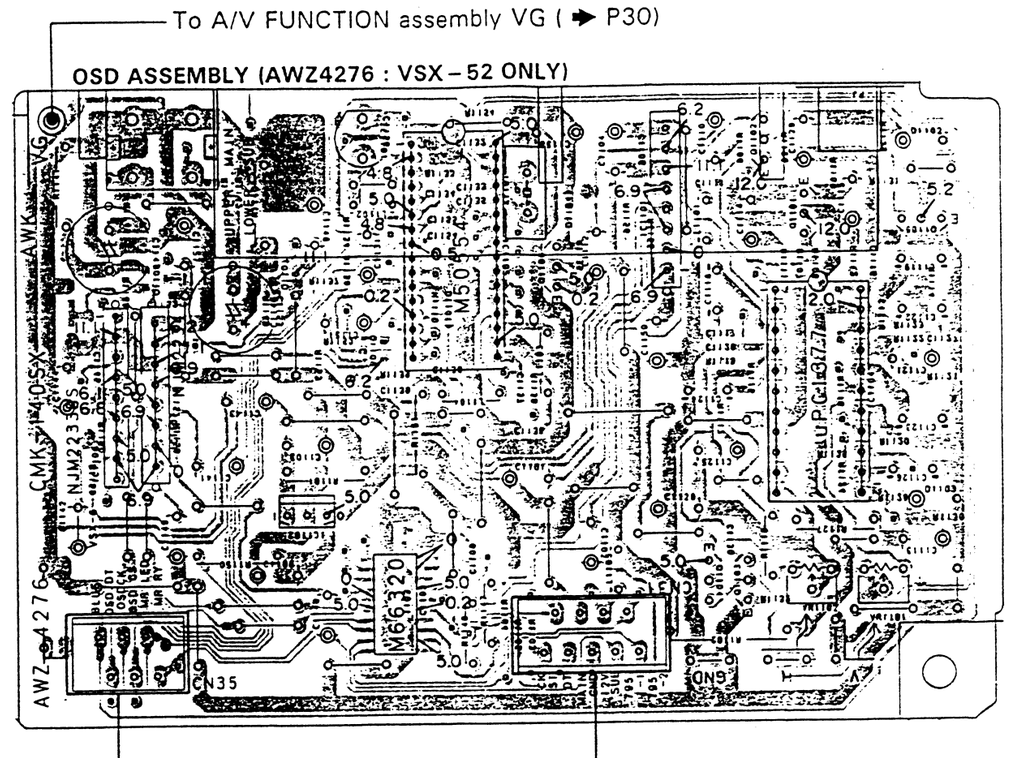
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols ▬ (Fast Operating Fuse) and/or ▬ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▬ (Fusible de type rapide) et/ou ▬ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

VSX-52



This P. C. B connection diagram is viewed from the parts mounted side.

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ◎(double circles) shows negative terminal.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E C B	Q504 or Q504 E C B	Transistor
Q215 C B E	Q215 or Q215	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarized)
C518	C518	Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols ▬ (Fast Operating Fuse) and/or ▬ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▬ (Fusible de type rapide) et/ou ▬ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

OSD assembly (AWZ4276 : VSX – 52 ONLY)

: VIDEO SIGNAL

MONITOR

To A/V FUNCTION assembly J31 (➡ P28)

7952-2
7952-1
SUB IN
+12V
D.G
MONI IN
DT DXD
ST CXD
CK

IC1101 : OSD SELECTOR

IC1104 : fH, fV OSC.

IC1105 : CHARACTER GENERATOR

V-SYNC
H-SYNC

IC1106, 1107 : OSD SELECTOR

Q1103, 1104 : WAVE FORM SHAPING

Q1102, 1105 : SYNC DETECTOR

Q1109 : BUFFER

Q1107, 1108 : OUTPUT DRIVER

VIDEO MAIN OUT

SUB OUT VIDEO

VR1101, VR1102 : Adjusting H. SYNC and V. SYNC for superimposed display.

TC1101 : Adjusting the superimposed display in the center.

Q1106 : CLAMPER

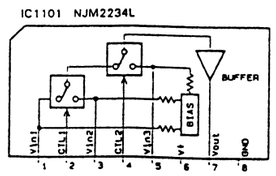
IC1103 : PORT EXPANDER

MR(4066.RY)
MR.LED
OSD.3C
OSD.CK
OSD.DA
BLUE

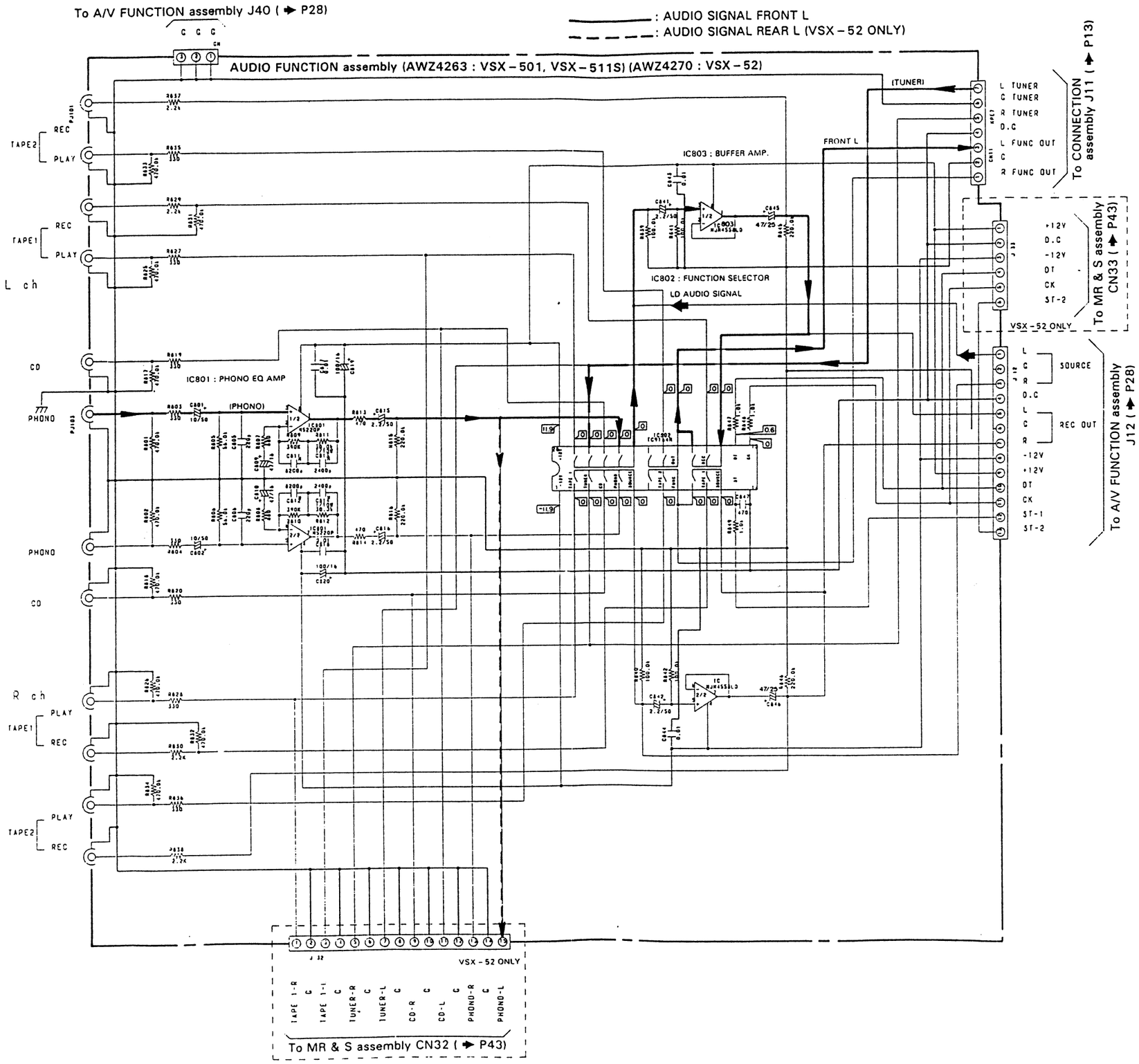
To FL. U – COM assembly J35 (➡ P57)

To A/V FUNCTION assembly VG (➡ P28)

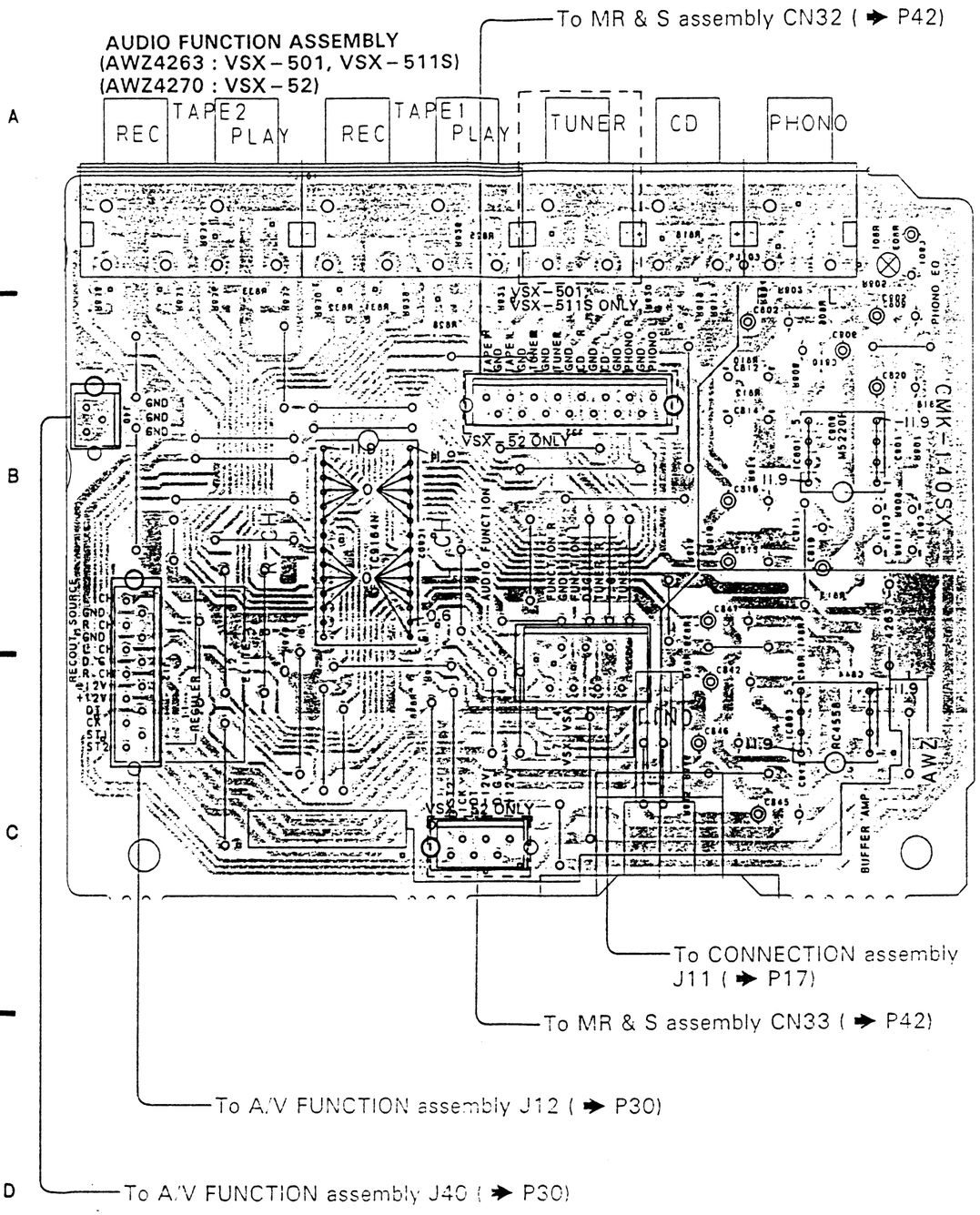
IC1101 NJM2234L



5.6 AUDIO FUNCTION ASSEMBLY

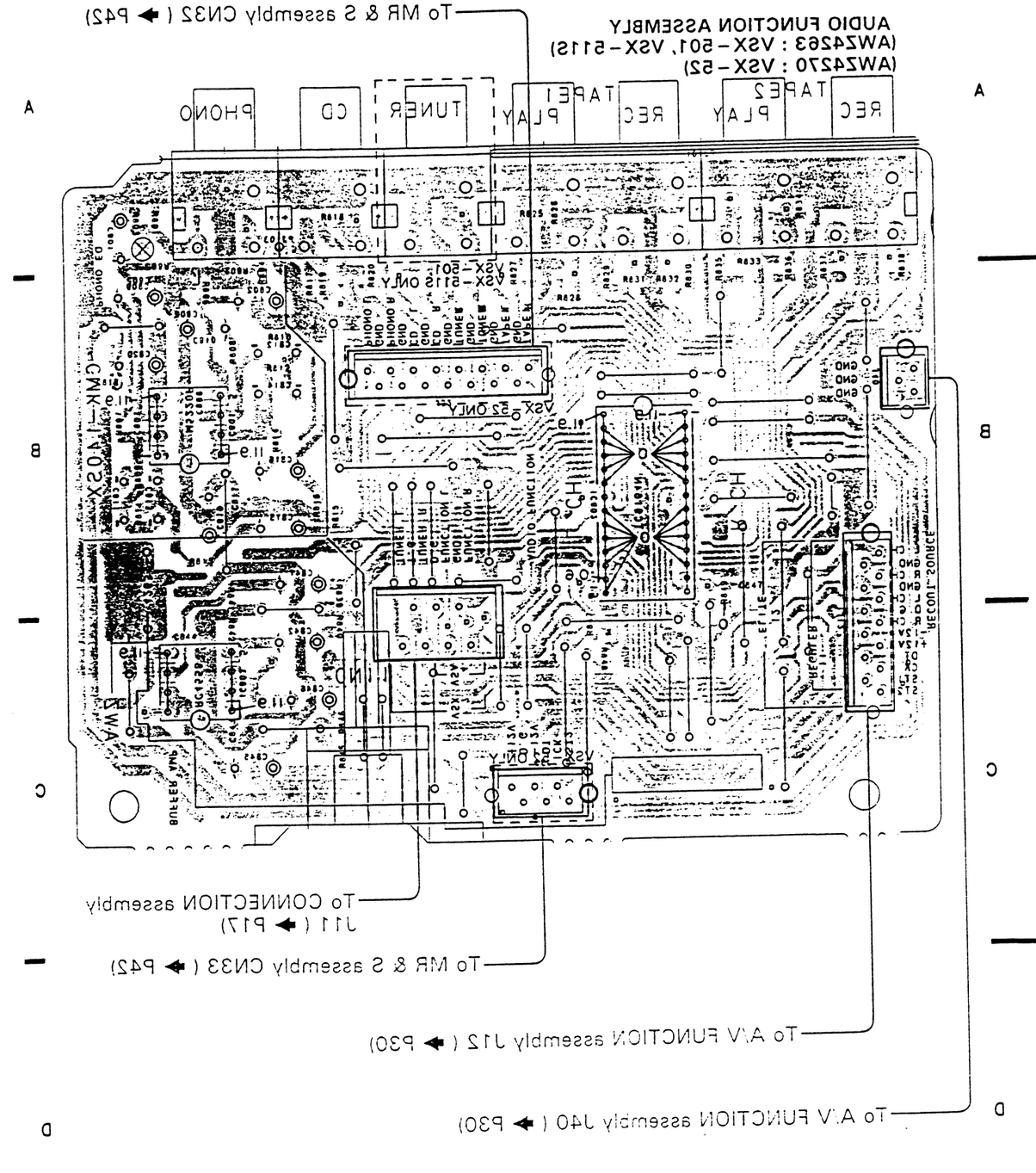


VSX-501, VSX-511S, VSX-52



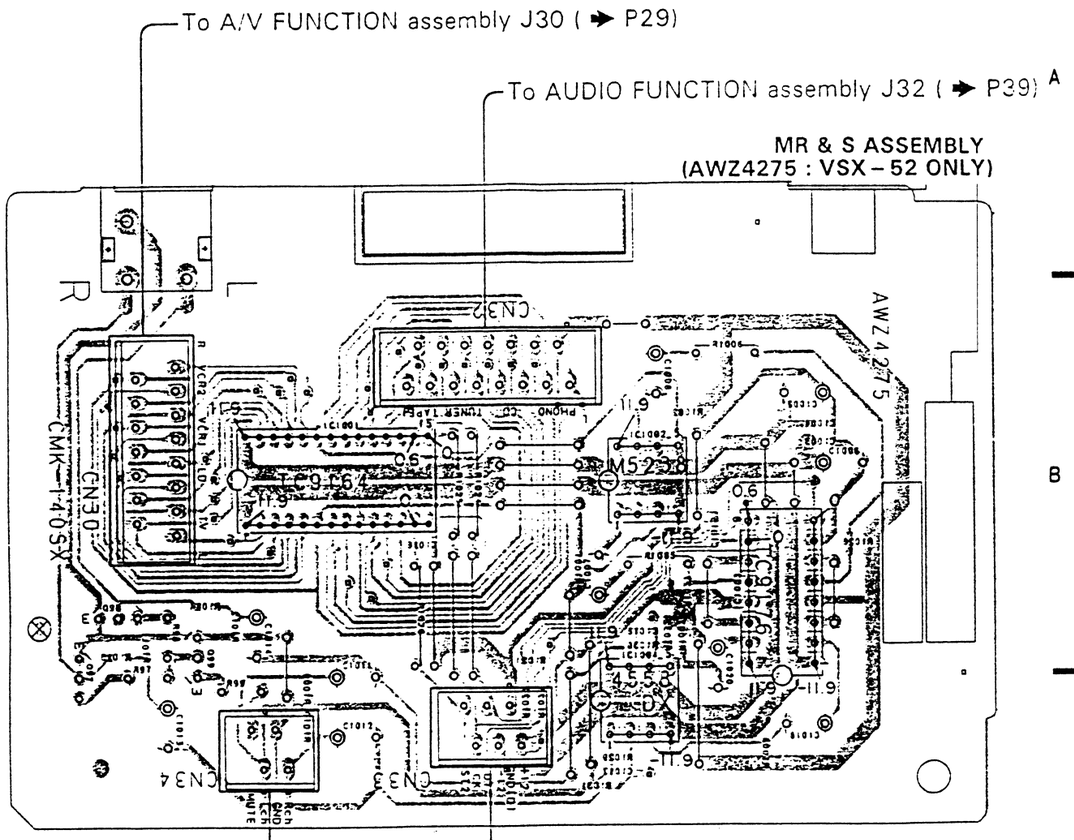
This P. C. B connection diagram is viewed from the parts mounted side.

VSX-501, VSX-511S, VSX-52



This P. C. B. connection diagram is viewed from the foil side.

5.7 MR & S ASSEMBLY


To A/V FUNCTION assembly J30 (➡ P29)
To AUDIO FUNCTION assembly J32 (➡ P39)
MR & S ASSEMBLY
(AWZ4275 : VSX – 52 ONLY)
CMK-1405X
AWZ4275
To AUDIO FUNCTION assembly J33 (➡ P39)
To VOLUME assembly J34 (➡ P48)

This P. C. B connection diagram is viewed from the parts mounted side.

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capactor terminal marked with ◎(double circles) shows negative terminal.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarized)
C518		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols -▮- (Fast Operating Fuse) and/or -▮- (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible -▮- (Fusible de type rapide) et/ou -▮- (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

To A/V FUNCTION assembly J30 (➡ P27)

VCR2 VCR1 LD TV

L G R G L G R G L G R G L G R

CN30 KPE15

: REAR L

MR & S assembly (AWZ4275 : VSX – 52 ONLY)

To AUDIO FUNCTION assembly J32 (➡ P37)

PHONO CD TUNER TAPE1

CN32 KPE15

IC1001 : SUB FUNCTION SELECTOR

IC1002 : BUFFER

IC1003 : VOLUME

IC1004 : AMP

To VOLUME assembly J34 (➡ P46)

CN34 KPE4

MUTE.AC

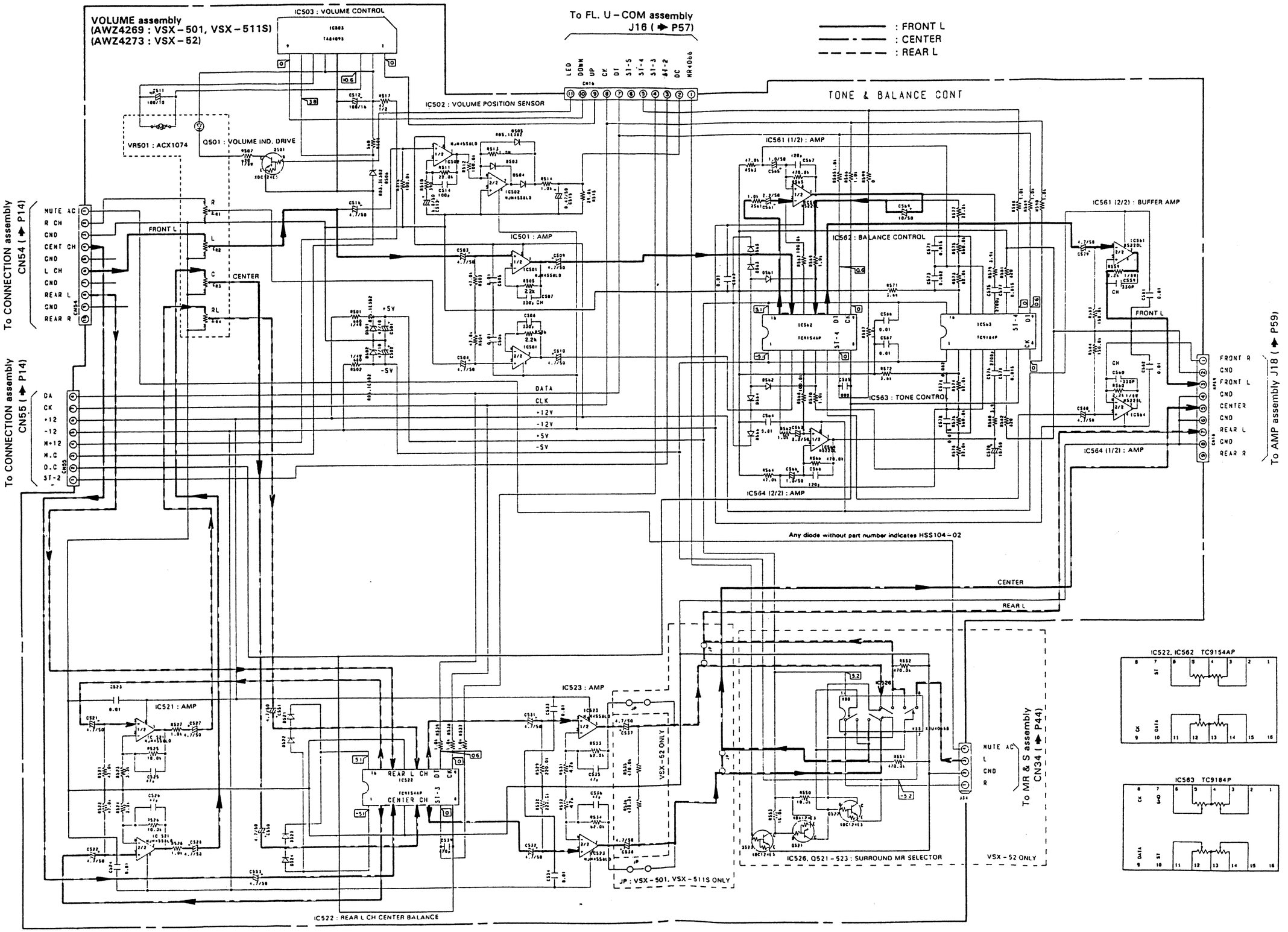
To AUDIO FUNCTION assembly J33 (➡ P38)

-12V D.GND +12V DATA CLOCK STROBE2

CN33 KPE6

Q97 – 99 : MUTE

5.8 VOLUME ASSEMBLY

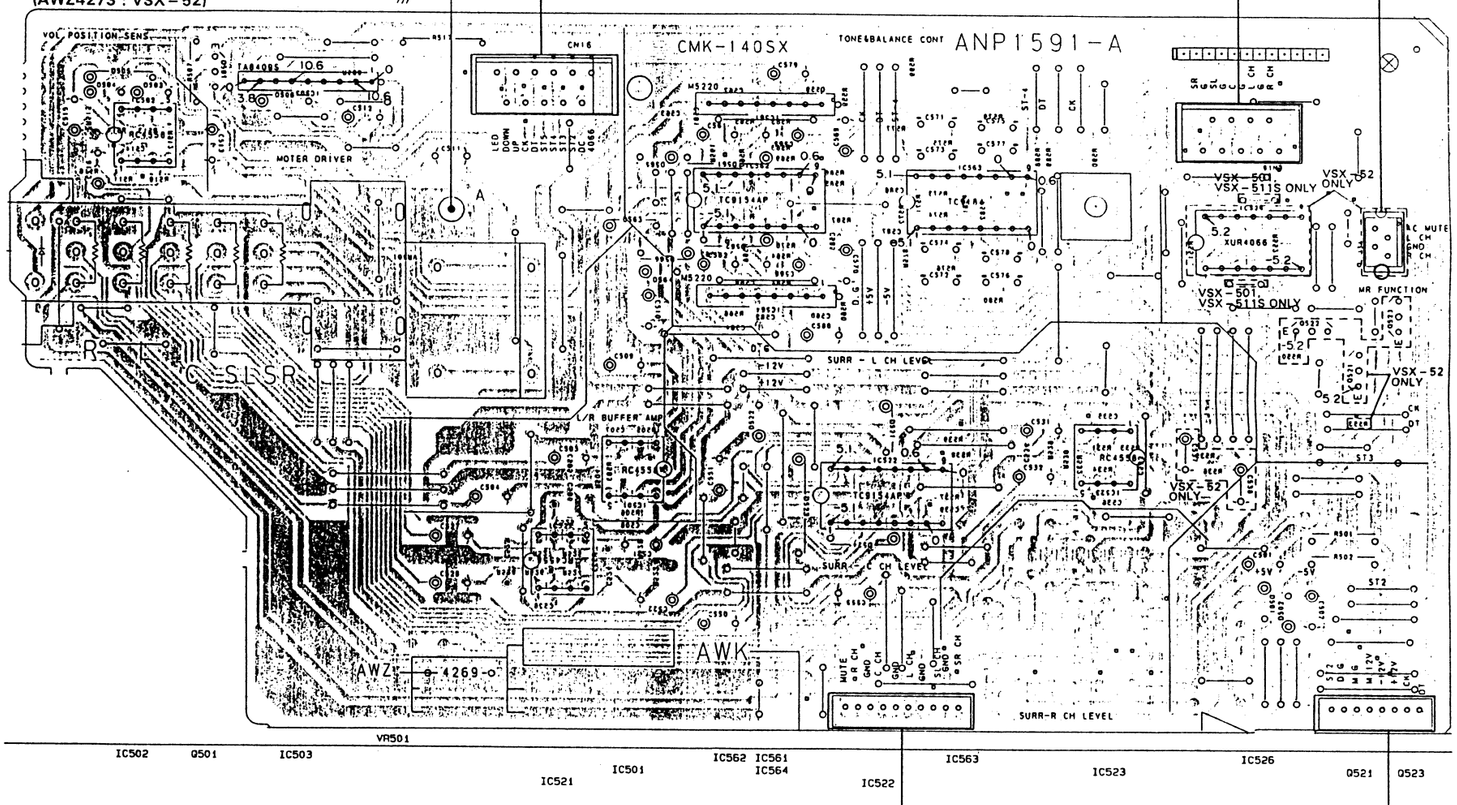


To MR & S assembly CN34 (➡ P42)

To FL. U – COM assembly J16 (➡ P56)

To AMP assembly J18 (➡ P61)

VOLUME ASSEMBLY
(AWZ4269 : VSX – 501, VSX – 511S)
(AWZ4273 : VSX – 52)

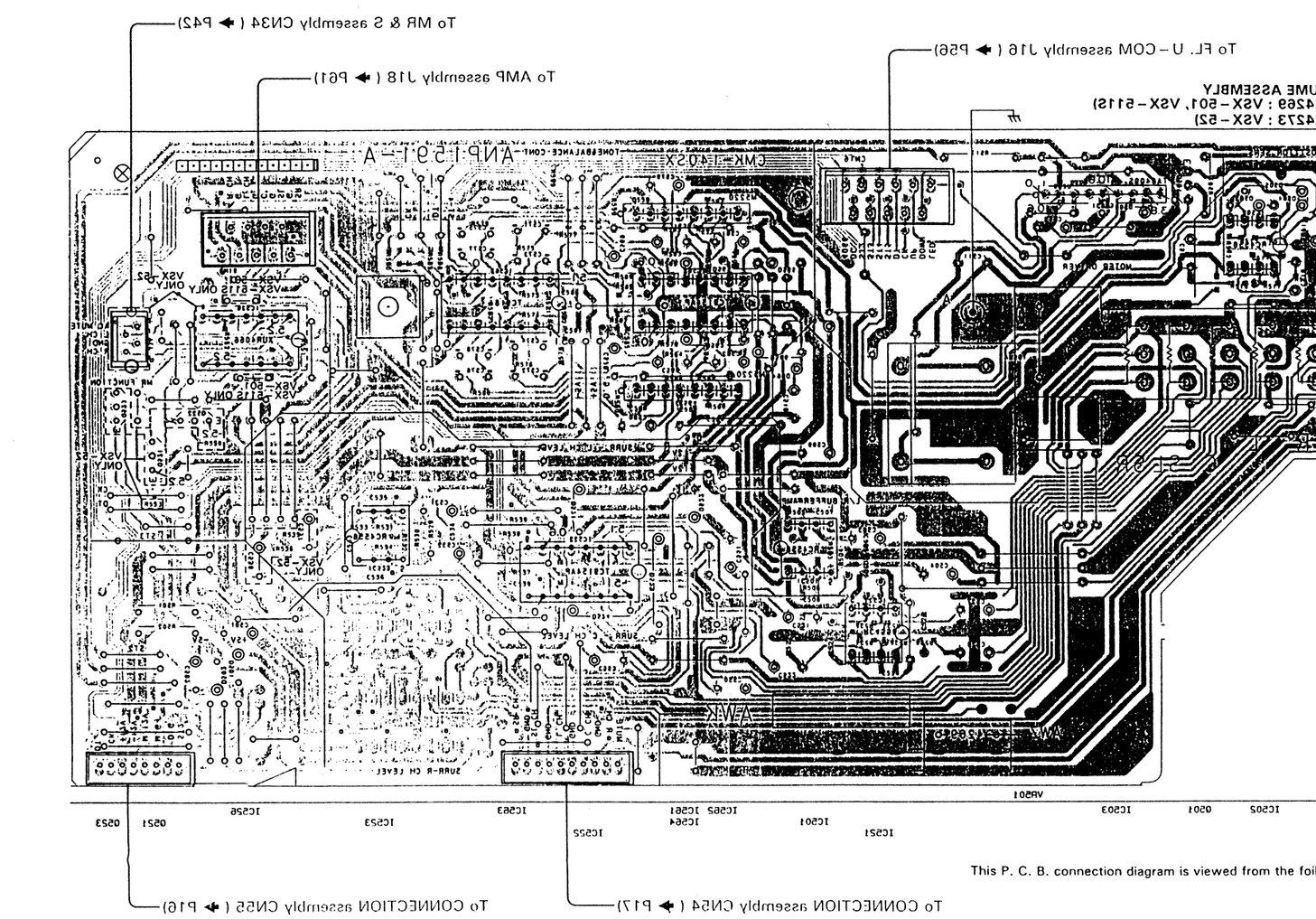


This P. C. B connection diagram is viewed from the parts mounted side.

To CONNECTION assembly CN54 (➡ P17)

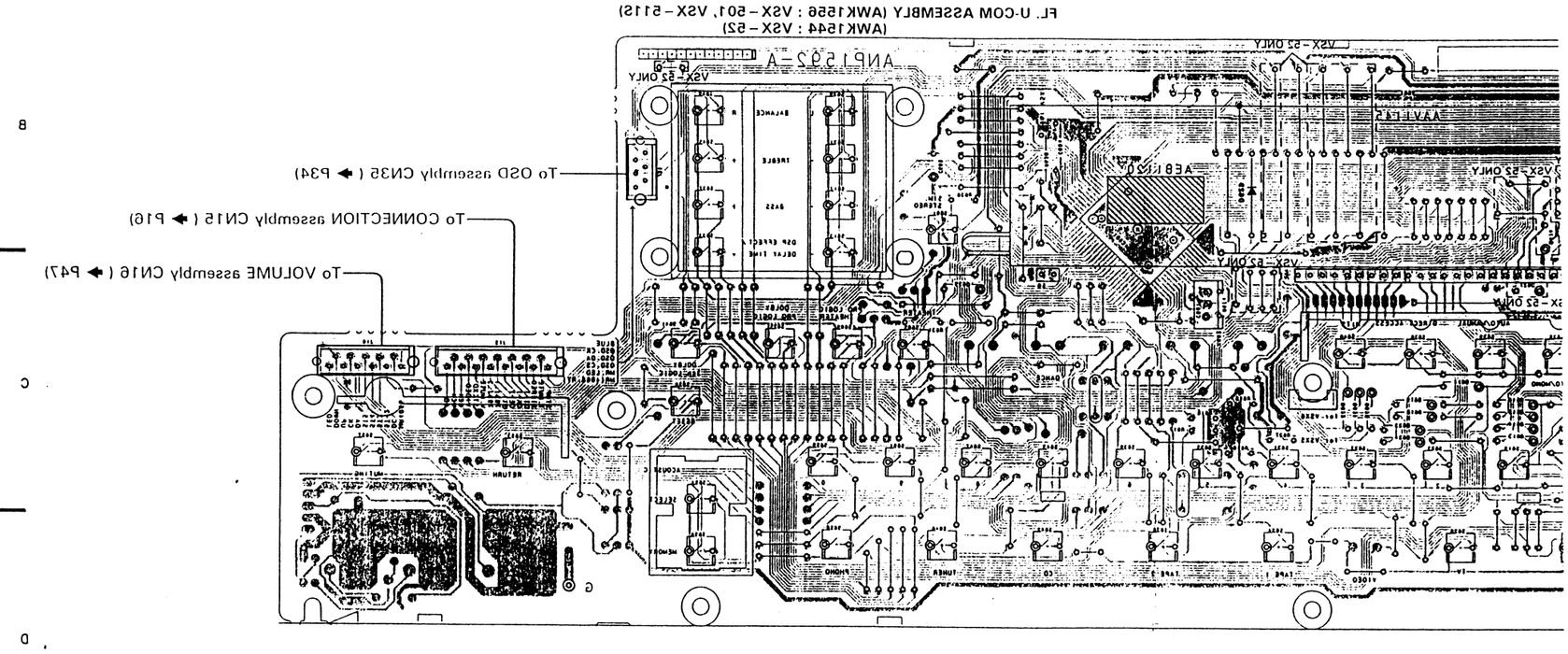
To CONNECTION assembly CN55 (➡ P16)

VSX-501, VSX-511S, VSX-52



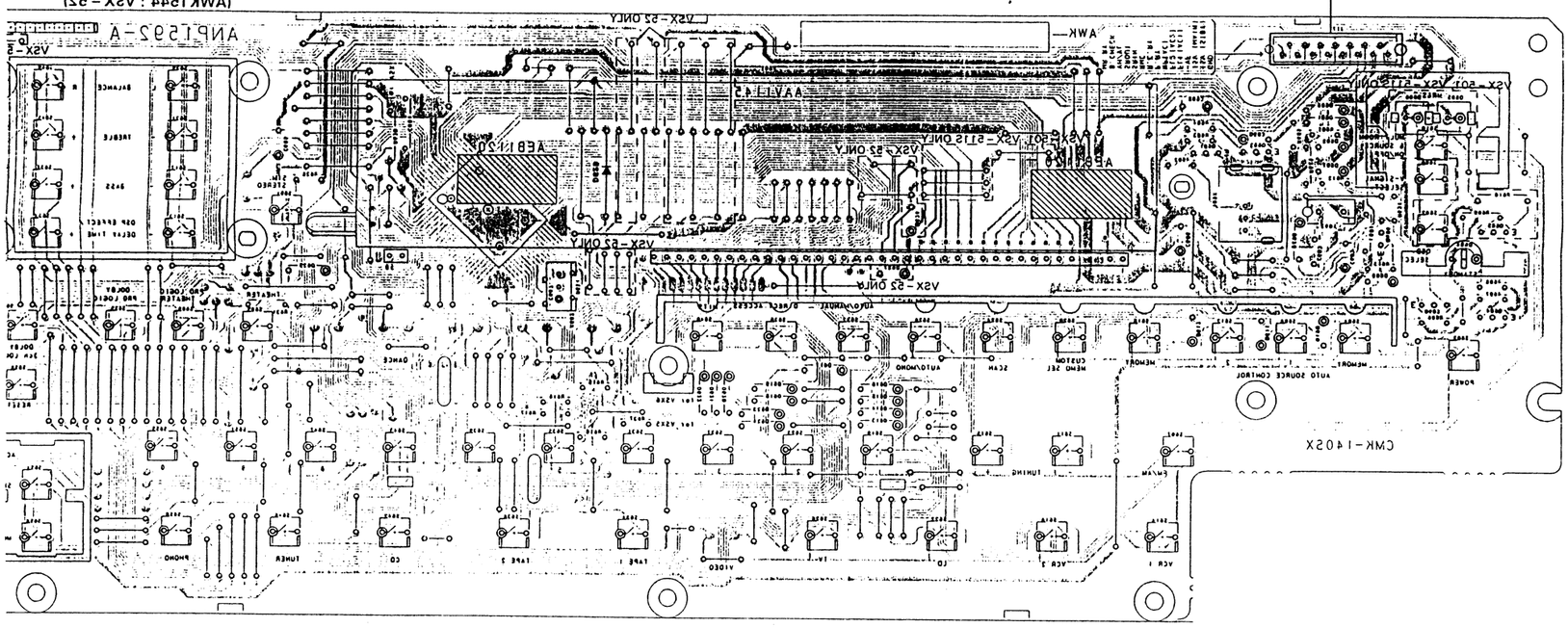
This P. C. B. connection diagram is viewed from the foil side.

5.9 FL. U-COM ASSEMBLY


FL. U-COM ASSEMBLY (AWK1556 : VSX-501, VSX-511S)
(AWK1544 : VSX-52)
To OSD assembly CN35 (➡ P34)
To CONNECTION assembly CN15 (➡ P16)
To VOLUME assembly CN16 (➡ P47)
VSX-52 ONLY
ANP1592-A

This P. C. B. connection diagram is viewed from the foil side.

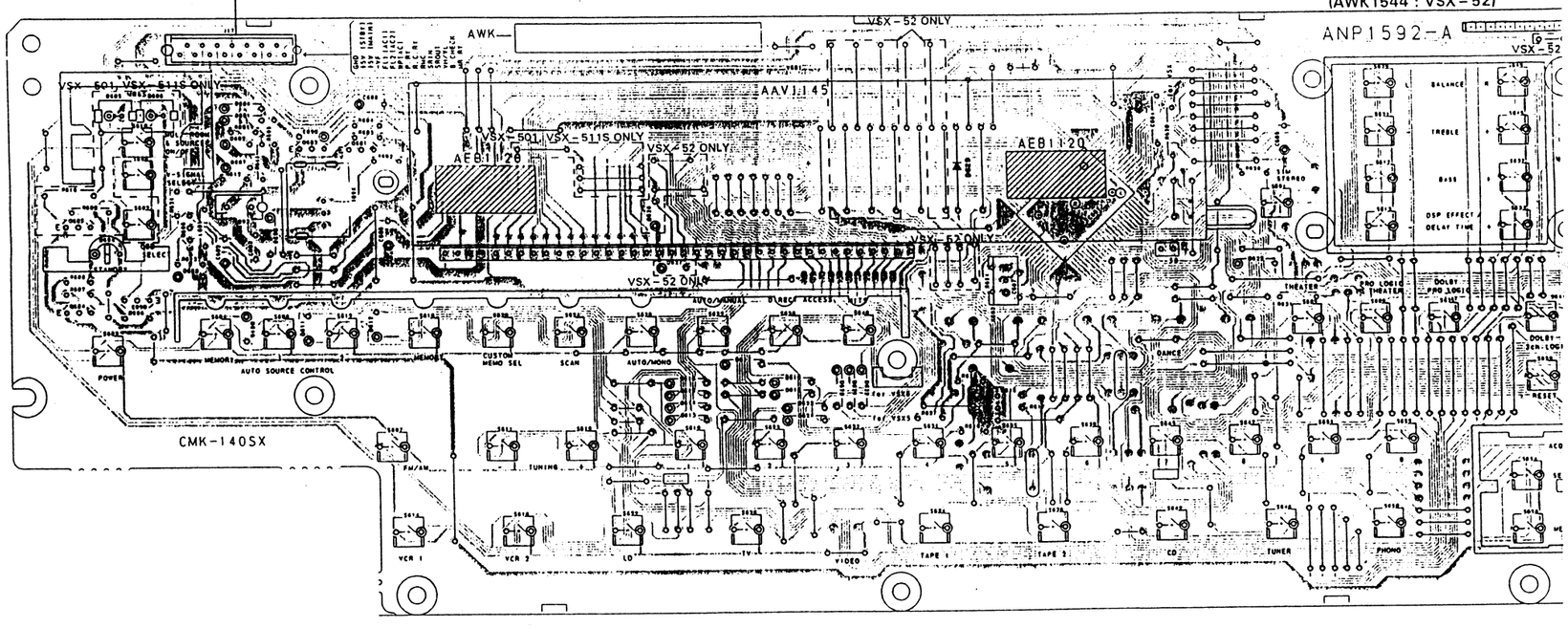
VSX-501, VSX-511S, VSX-52



This P. C. B. connection diagram is viewed from the foil side.

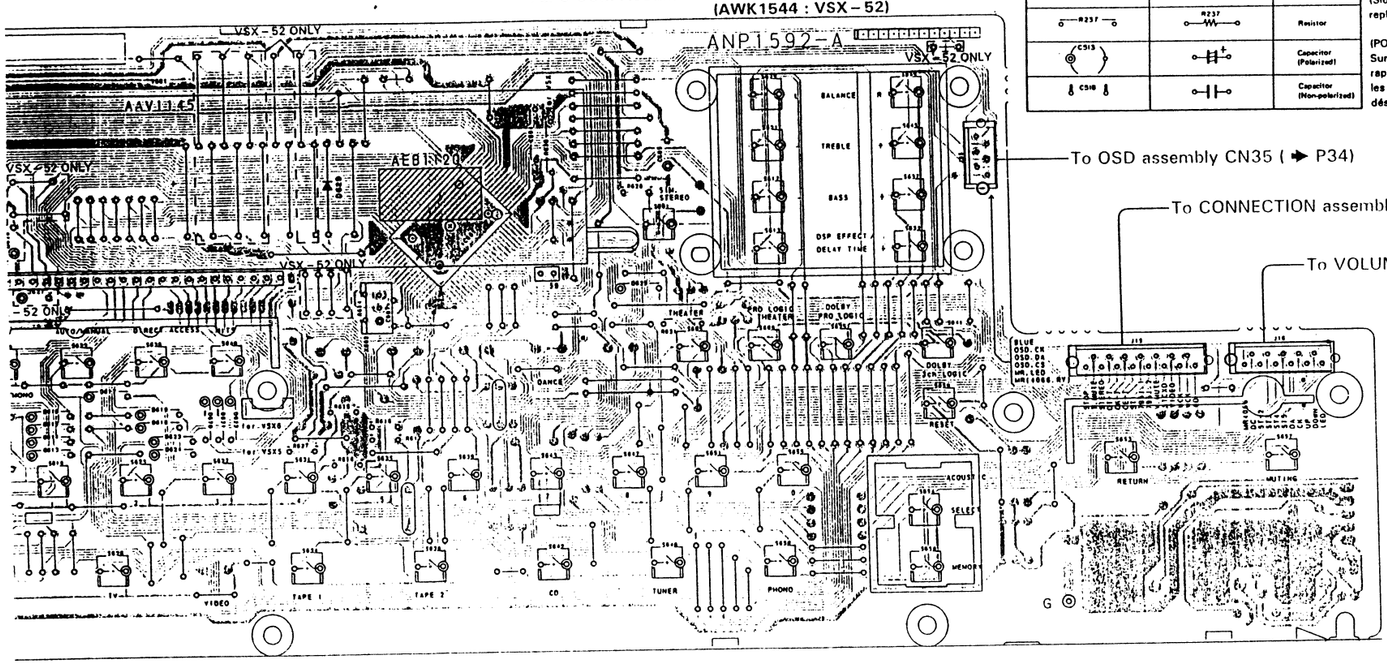
To POWER SUPPLY assembly CN17 (➡ P74)

FL. U-COM ASSEMBLY (AWK1556 : VSX-501, VSX-5
(AWK1544 : VSX-52)



This P. C. B connection diagram is viewed from the parts mounted side.

FL. U-COM ASSEMBLY (AWK1556 : VSX-501, VSX-511S)
(AWK1544 : VSX-52)



NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following T able.
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E C B	or	Transistor
Q215 E C B		Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513		Capacitor (Polarized)
C548		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols ▮⊟⊢ (Fast Operating Fuse) and/or ▮⊟R (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▮⊟⊢ (Fusible de type rapide) et/ou ▮⊟R (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

This P. C. B connection diagram is viewed from the parts mounted side.

FL. U-COM assembly (AWK1556 : VSX-501, VSX-511S)
(AWK1544 : VSX-52)

V601
AAV1145

VSX-501, VSX-511S

VSX-52 ONLY

A(1:13)

B(1:16)

To CONNECTION assembly CN15 (➡ P13)
STOP
T.MUTE
STEREO
DT-T
CK-T
CE-T
ST1
7951.1
7951.2
V.MUTE
STCXD
VIDEO
BCK
WCK
CD

To VOLUME assembly CN16 (➡ P46)
LED
DOWN
UP
CK
DA
ST5
ST4
ST3
ST-2
DC
MR4066

C(1:26)

IC601 : SYSTEM CONTROL

IC601
PDG083A

VSX

(VSX/VSX1)
(SR.o)
(B-check)
(VH/VL)
(STS)
(RY-R.C)
(ST4)
(BCK)
(WCK)
(CD)
(CK)
(ST3)
(DA)
(STCXD)
(ST2)
(ST1)
(VSYS/5)
(KEY.in1)
(KEY.in2)
(KEY.in3)
(KEY.in4)
(NC)
(UP)
(DOWN)

(AC)
(STEREO)
(STDET)
(DA.T)
(CK.T)
(CE.T)
(MUTE.T)
(NC)
(+5V.VAA)
(-VF)
(GRID1)
(GRID2)
(GRID3)
(GRID4)
(GRID5)
(GRID6)

(GRID7)
(GRID8)
(GRID9)
(GRID10)
(GRID11)
(GRID12)
(GRID13)
(SEG1A)
(SEG17)
(SEG16)
(SEG15/KEY15)
(SEG14/KEY14)
(SEG13/KEY13)
(SEG12/KEY12)
(SEG11/KEY11)
(SEG10/KEY10)
(SEG9/KEY9)
(SEG8/KEY8)
(SEG7/KEY7)
(SEG6/KEY6)
(SEG5/KEY5)
(SEG4/KEY4)
(SEG3/KEY3)
(SEG2/KEY2)
(SEG1/KEY1)

(LED)
(OSD.CS)
(OSD.DA)
(OSD.CK)
(OSD.BLUE)
(OSET.IN)
(V.MUTE)
(7951.2)
(7951.1)
(P.RY)
(SRout)
(EXTAL)
(XTAL)

VSX-52 ONLY
MR(4066,RY)
MR.LED
OSD.CS
OSD.CK
OSD.DA
BLUE

To OSD assembly CN35 (➡ P35)

Q603, 604 : STBY LED DRIVER

Q601, 602 : RMC DRIVER

Q606 : RESET

Q605 : MR & S LED DRIVER

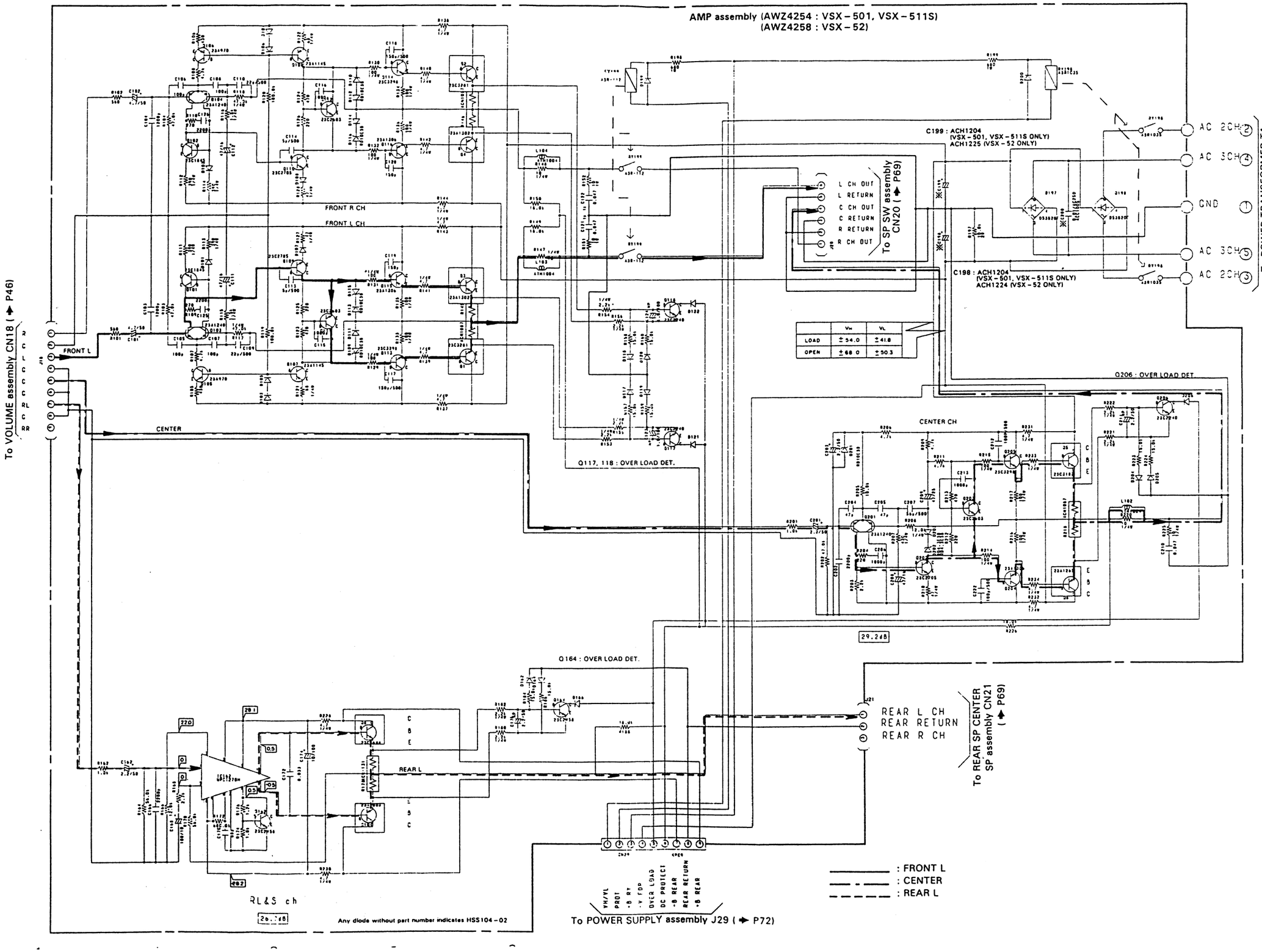
Any diode without part number indicates HSS104-02

F(1:7)

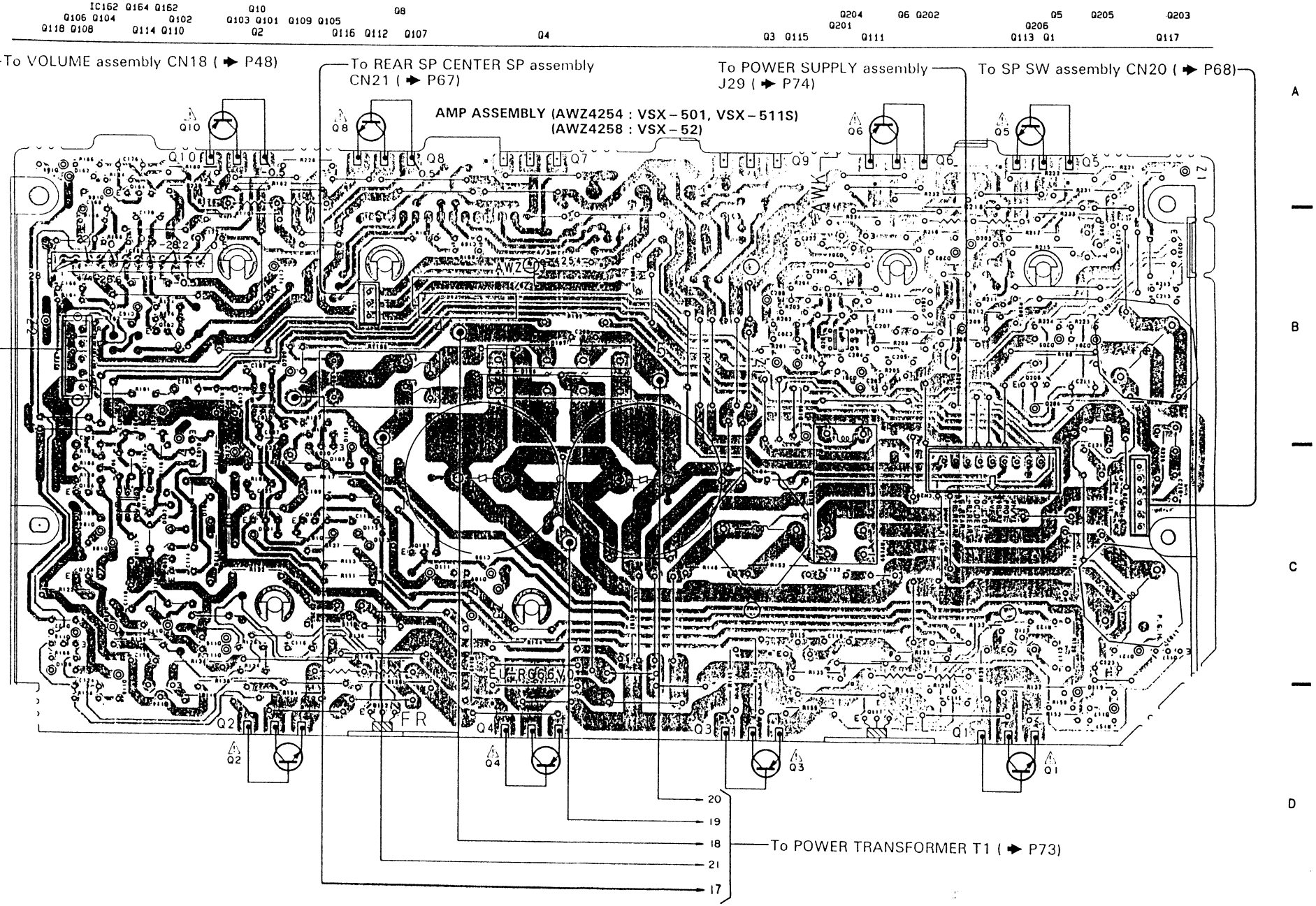
Vss(GND)
+5V(STBY)
+5V(MAIN)
-VF
FL1(AC1)
FL2(AC2)
WP(AC)
P.RY
RY-R.C
RMC
SRIN
SROUT
VH/VL
B.CHECK
MR.RY

To POWER SUPPLY assembly CN17 (➡ P71)

5.10 AMP ASSEMBLY



This P. C. B connection diagram is viewed from the parts mounted side.



VSX-501, VSX-511S, VSX-52

This P. C. B. connection diagram is viewed from the foil side.

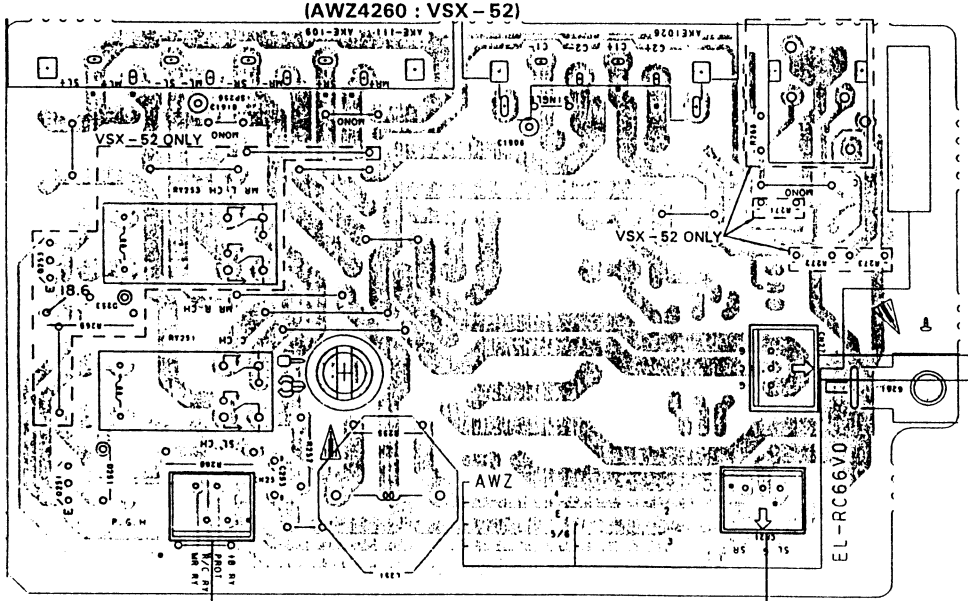
AMP ASSEMBLY (AWM2564 : VSX-501, VSX-511S)
(AWM2568 : VSX-52)
To VOLUME assembly CN18 (➡ P48)
To REAR SP CENTER SP assembly CN21 (➡ P67)
To POWER SUPPLY assembly J29 (➡ P74)
To SP SW assembly CN20 (➡ P68)
To POWER TRANSFORMER T1 (➡ P73)

5.11 SP SW ASSEMBLY, FRONT SP ASSEMBLY, PRE OUT TERMINAL ASSEMBLY AND REAR SP CENTER SP ASSEMBLY

VSX-52 ONLY
FRONT SP ASSEMBLY
VSX-501, VSX-511S ONLY
FRONT SP ASSEMBLY
REAR SP CENTER SP assembly (AWZ2566 : VSX-501, VSX-511S)
(AWZ2560 : VSX-52)
VSX-52 ONLY
To POWER SUPPLY assembly J25 (➡ P73)
To AMP assembly J21 (➡ P61)
To AMP assembly J20 (➡ P62)
VSX-52 ONLY
PRE OUT TERMINAL ASSEMBLY
(VSX-52 ONLY)
SW assembly
(AWZ2562 : VSX-501, VSX-511S)
(AWZ2569 : VSX-52)

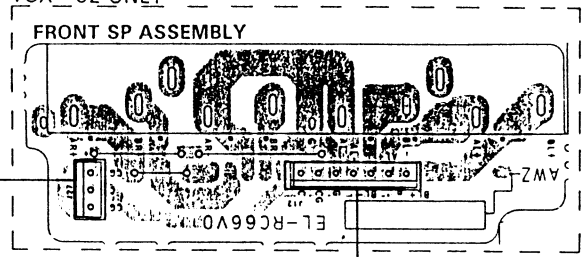
This P. C. B. connection diagram is viewed from the foil side.

REAR SP CENTER SP assembly (AWZ4256 : VSX – 501, VSX – 511S)
(AWZ4260 : VSX – 52)



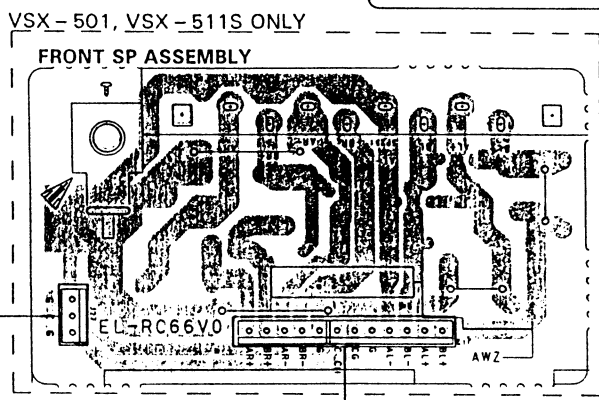
VSX – 52 ONLY

FRONT SP ASSEMBLY



VSX – 501, VSX – 511S ONLY

FRONT SP ASSEMBLY



C This P. C. B connection diagram is viewed from the parts mounted side.

To AMP assembly J20 (➡ P62)

NOTE

1. The P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
0504 E C B	0504	Transistor
0219	0219	Radiator type transistor
0203	0203	Diode
R237	R237	Resistor
		Capacitor (Polarized)
C516		Capacitor (Non polarized)

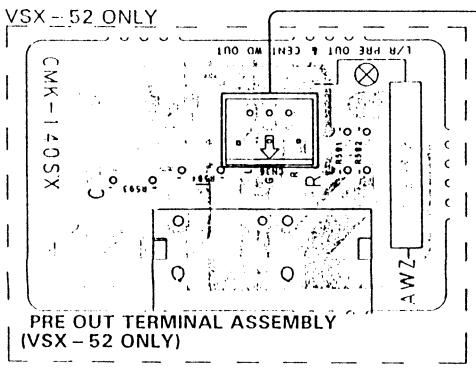
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi fixed resistor

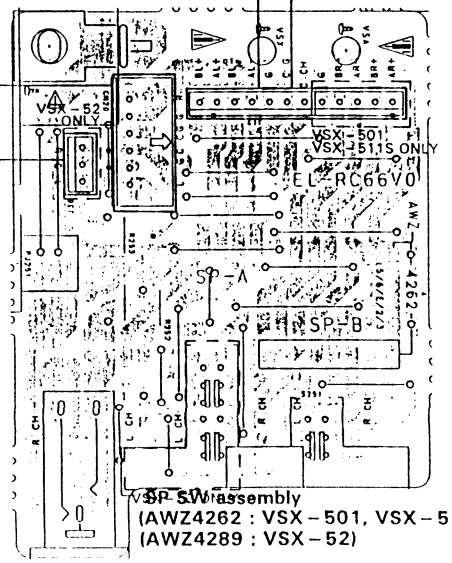
(FOR CANADIAN MODEL ONLY)
Fuse symbols ▮ (Fast Operating Fuse) and/or ▮ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▮ (Fusible de type rapide) et/ou ▮ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

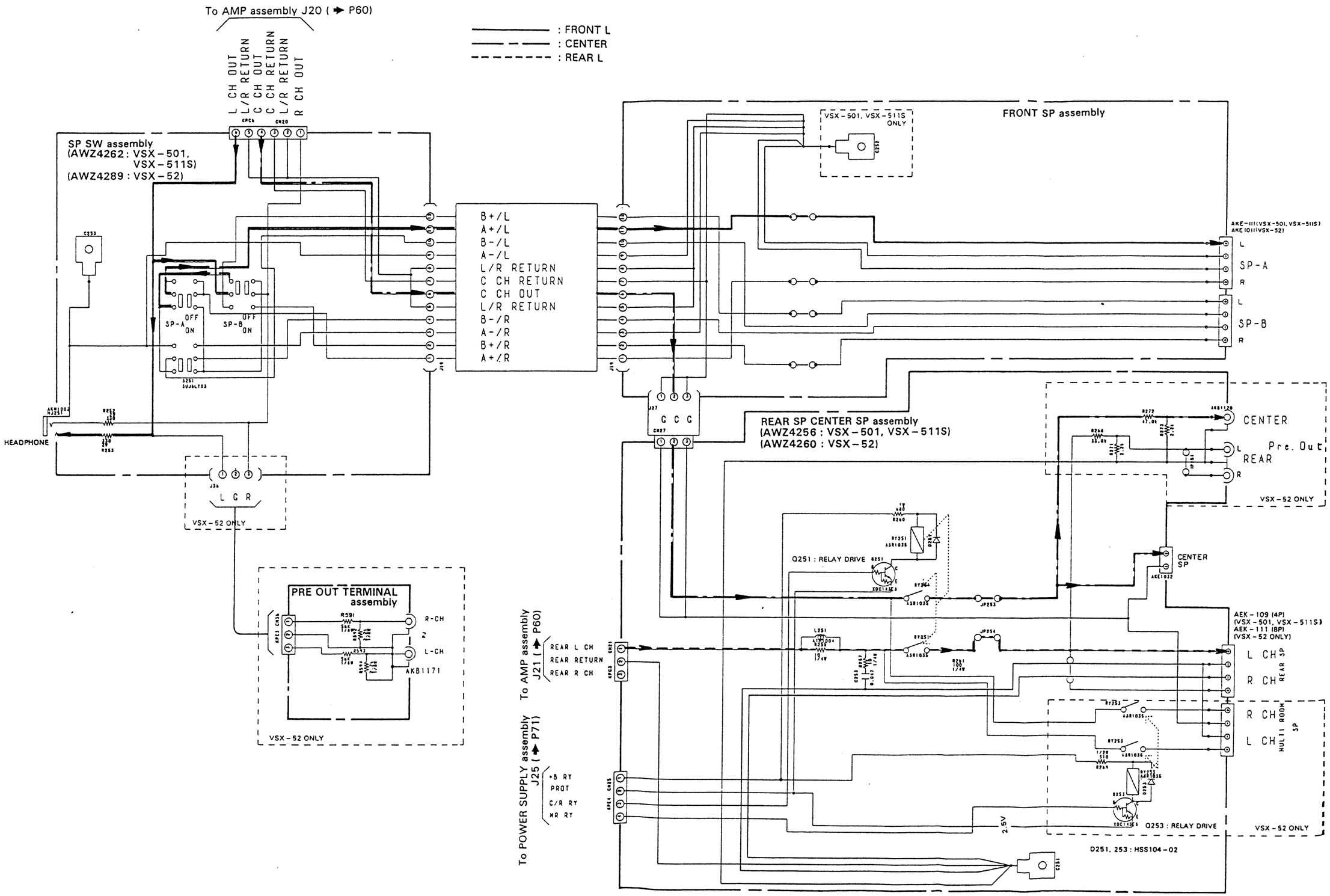
VSX – 52 ONLY



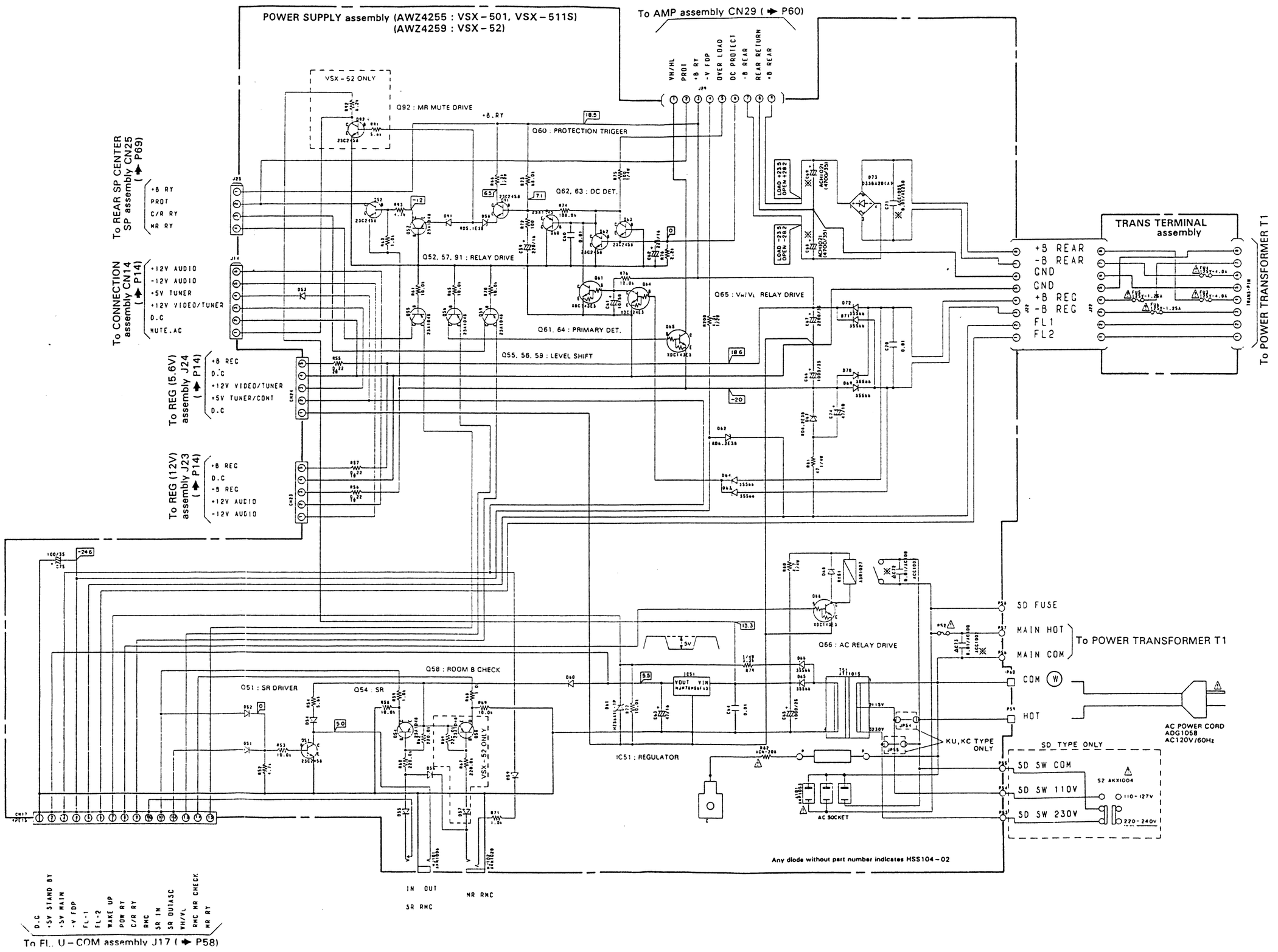
PRE OUT TERMINAL ASSEMBLY
(VSX – 52 ONLY)



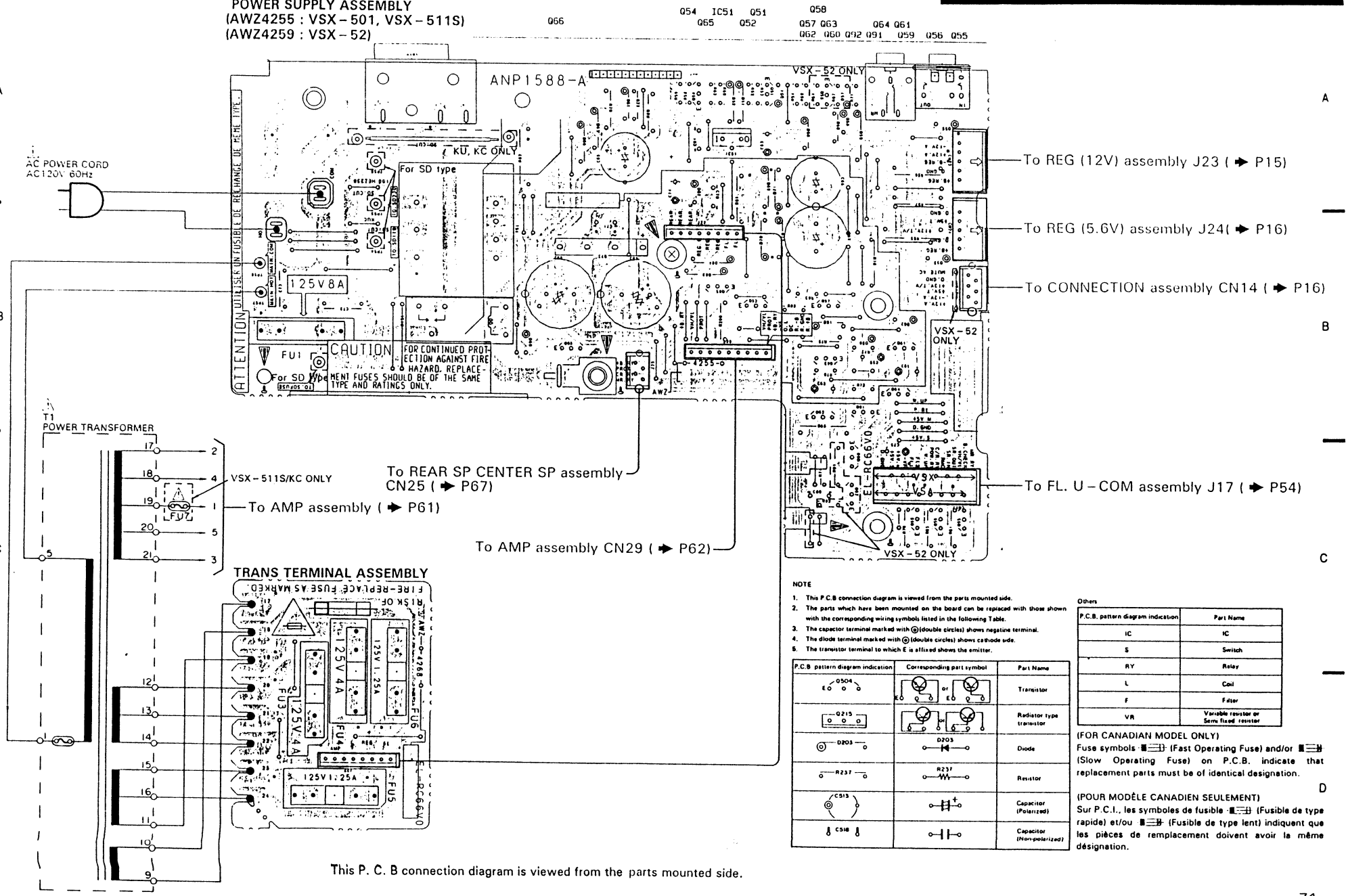
SP S.W assembly
(AWZ4262 : VSX – 501, VSX – 511S)
(AWZ4289 : VSX – 52)


To AMP assembly J20 (➡ P60)
: FRONT L
: CENTER
: REAR L
L CH OUT
L/R RETURN
C CH OUT
C CH RETURN
L/R RETURN
R CH OUT
SP SW assembly
(AWZ4262 : VSX-501, VSX-511S)
(AWZ4289 : VSX-52)
SP-A OFF ON
SP-B OFF ON
B+/L
A+/L
B-/L
A-/L
L/R RETURN
C CH RETURN
C CH OUT
L/R RETURN
B-/R
A-/R
B+/R
A+/R
HEADPHONE
L G R
VSX-52 ONLY
PRE OUT TERMINAL assembly
R591
R-CH
L-CH
AKB1171
VSX-52 ONLY
VSX-501, VSX-511S ONLY
FRONT SP assembly
AKE-111(VSX-501, VSX-511S)
AKE-101(VSX-521
SP-A
SP-B
L
R
G C G
REAR SP CENTER SP assembly
(AWZ4256 : VSX-501, VSX-511S)
(AWZ4260 : VSX-52)
CENTER
Pre. Out
REAR
VSX-52 ONLY
Q251 : RELAY DRIVE
CENTER SP
AEK-109 (4P)
(VSX-501, VSX-511S)
AEK-111 (8P)
(VSX-52 ONLY)
To AMP assembly J21 (➡ P60)
REAR L CH
REAR RETURN
REAR R CH
L CH
R CH
REAR SP
R CH
L CH
HULI ROOM SP
To POWER SUPPLY assembly J25 (➡ P71)
+B RY
PROT
C/R RY
HR RY
2.5V
Q253 : RELAY DRIVE
VSX-52 ONLY
D251, 253 : HSS104-02

5.12 POWER SUPPLY ASSEMBLY AND TRANS TERMINAL ASSEMBLY



POWER SUPPLY ASSEMBLY
(AWZ4255 : VSX – 501, VSX – 511S)
(AWZ4259 : VSX – 52)



This P. C. B connection diagram is viewed from the parts mounted side.

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.
3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504		Transistor
Q215		Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
CS13		Capacitor (Polarized)
CS16		Capacitor (Non-polarized)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi fixed resistor

(FOR CANADIAN MODEL ONLY)
Fuse symbols ▮⊟▮ (Fast Operating Fuse) and/or ▮⊟▮ (Slow Operating Fuse) on P.C.B. indicate that replacement parts must be of identical designation.

(POUR MODÈLE CANADIEN SEULEMENT)
Sur P.C.I., les symboles de fusible ▮⊟▮ (Fusible de type rapide) et/ou ▮⊟▮ (Fusible de type lent) indiquent que les pièces de remplacement doivent avoir la même désignation.

VSX-501, VSX-511S, VSX-52

POWER SUPPLY ASSEMBLY
(AWZ4255 : VSX-501, VSX-511S)
(AWZ4259 : VSX-52)
ANP1588-A
To REG (12V) assembly J23 (➡ P15)
To REG (5.6V) assembly J24 (➡ P16)
To CONNECTION assembly CN14 (➡ P16)
To FL, U-COM assembly J17 (➡ P54)
To REAR SP CENTER SP assembly
CN25 (➡ P67)
To AMP assembly (➡ P61)
To AMP assembly CN29 (➡ P62)
TRANS TERMINAL ASSEMBLY
POWER TRANSFORMER
AC POWER CORD
AC 120V 60Hz
VSX-52 ONLY
VSX-511S/KC ONLY
CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATINGS FUSE.

This P. C. B. connection diagram is viewed from the foil side.

6. PCB PARTS LIST

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 ..... RD1/8PM 5 6 1 J
47kΩ → 47 × 10³ → 473 ..... RD1/4PS 4 7 3 J
0.5Ω → 0R5 ..... RN2H 0 R 5 K
1Ω → 010 ..... RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10¹ → 5621 ..... RN1/4PC 5 6 2 1 F

Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES			
◉		TUNER ASSEMBLY	AWE1140
◉		AMP ASSEMBLY	AWZ4254
◉		POWER SUPPLY ASSEMBLY	AWZ4255
◉		REAR SP CENTER SP ASSEMBLY	AWZ4256
NSP		FRONT SP ASSEMBLY	AWZ4257
◉		SP SW ASSEMBLY	AWZ4262
NSP		TRANS TERMINAL ASSEMBLY	AWZ4268
◉		AUDIO FUNCTION ASSEMBLY	AWZ4263
◉		A/V FUNCTION ASSEMBLY	AWZ4264
◉		CONNECTION ASSEMBLY	AWZ4265
◉		REG (12V) ASSEMBLY	AWZ4266
◉		REG (5.6V) ASSEMBLY	AWZ4267
◉		VOLUME ASSEMBLY	AWZ4269
◉		FL. U-COM ASSEMBLY	AWK1556
		DOL. PRO. MOD. ASSEMBLY	AXQ1009
TUNER ASSEMBLY			
SEMICONDUCTORS			
	IC431	AM/FM IC	LA1265S
	IC451	MPX IC	AN7470P
	IC471	PLL IC	LM7001
	Q401	MOS-FET	2SK241
	Q402	TRANSISTOR	2SC2786
	Q403	TRANSISTOR	2SC2668
	Q405	N-FET	2SK161
	Q421	TRANSISTOR	2SC2668
	Q451	TRANSISTOR	2SC2603
	Q452, 453	TRANSISTOR	2SC1740S
	Q454	TRANSISTOR	2SA933S
	Q471	N-FET	2SK246
	Q472	TRANSISTOR	2SC1740SLN
	Q473, 474	TRANSISTOR	RN2201
	D401-403	VARI-CAP DIODE	1SV147
	D431-435	DIODE	1SS252

Mark	No.	Description	Parts No.
COILS & TRANSFORMER			
	F421	CERAMIC FILTER	ATF-107
	F422	CERAMIC FILTER	ATF-119
	F431	CERAMIC FILTER	ATF-208
	L401	COIL	ATC1001
	L402	COIL	ATC1002
	L403	COIL	ATC1004
	L404	COIL	ATC1005
	L405	COIL	ATC1003
	L406, 407	AXIAL INDUCTOR	LAU2R2M
	L431	COIL	ATE-079
	T402	IF TRANSFORMER	ATE-063
CAPACITORS			
	C400	CERAMIC CAPACITOR	CKDYF102Z50
	C401	CERAMIC CAPACITOR	CCDRH330J50
	C402	CERAMIC CAPACITOR	CCDRH390J50
	C403	CERAMIC CAPACITOR	CKPUYY103N16
	C404, 405	CERAMIC CAPACITOR	CCDRH330J50
	C406	CERAMIC CAPACITOR	CCDCH020C50
	C409	CERAMIC CAPACITOR	CKPUYB101K50
	C410-412	CERAMIC CAPACITOR	CKPUYY103N16
	C413	CERAMIC CAPACITOR	CCDCH150J50
	C414	CERAMIC CAPACITOR	CCDCH330J50
	C415	CERAMIC CAPACITOR	CCDCH080D50
	C416	CERAMIC CAPACITOR	CCDTH180J50
	C417	CERAMIC CAPACITOR	CCDCH010C50
	C418, 419	CERAMIC CAPACITOR	CKPUYY103N16
	C420	ELECT. CAPACITOR	CEAS100M50
	C421, 422	CERAMIC CAPACITOR	CKPUYY103N16
	C433	ELECT. CAPACITOR	CEAS4R7M50
	C435	CERAMIC CAPACITOR	CKCYF472Z50
	C436	CERAMIC CAPACITOR	CKCYX683M25
	C437	ELECT. CAPACITOR	CEAS100M50

Mark No.	Description	Parts No.
C438	ELECT. CAPACITOR	CEAS2R2M50
C439, 440	CERAMIC CAPACITOR	CKCYF223Z50
C441	AXIAL CAPACITOR	CKPUYF223Z25
C442	ELECT. CAPACITOR	CEAS0R1M50
C443	ELECT. CAPACITOR	CEAS3R3M50
C444	CERAMIC CAPACITOR	CKPUYB331K50
C445	AXIAL CAPACITOR	CCPUSL470J50
C446, 447	MYLAR FILM CAPACITOR	CQMA561K50
C451	ELECT. CAPACITOR	CEAS101M16
C452	ELECT. CAPACITOR	CEANP4R7M35
C453	CERAMIC CAPACITOR	CKCYF473Z50
C454	CAPACITOR	ACE1039
C455	ELECT. CAPACITOR	CEAS3R3M50
C456	ELECT. CAPACITOR	CEAS1R5M50
C457	ELECT. CAPACITOR	CEASR22M50
C458	ELECT. CAPACITOR	CEAS470M16
C459, 460	MYLAR FILM CAPACITOR	CQMA102J50
C461, 462	ELECT. CAPACITOR	CEAS4R7M50
C463, 464	ELECT. CAPACITOR	CEAS470M16
C465	CERAMIC CAPACITOR	CKPUYY103N16
C466	CERAMIC CAPACITOR	CCCSL121J50
C468, 469	MYLAR FILM CAPACITOR	CQMA182J50
C471	CERAMIC CAPACITOR	CKPUYY103N16
C472	AXIAL CAPACITOR	CKPUYF223Z25
C473	CERAMIC CAPACITOR	CKPUYY103N16
C475	ELECT. CAPACITOR	CEAS100M50
C476	CERAMIC CAPACITOR	CKPUYY103N16
C477	CERAMIC CAPACITOR	CKCYF103Z50
C478	AUDIO FILM CAPACITOR	CFTXA224J50
C479	AXIAL CAPACITOR	CCPUSL220J50
C480	CERAMIC CAPACITOR	CKPUYY103N16
C481, 482	CERAMIC CAPACITOR	CCDCH150J50
C483	CERAMIC CAPACITOR	CKPUYB101K50
C484	ELECT. CAPACITOR	CEAS470M16
C485	CERAMIC CAPACITOR	CKPUYY103N16
RESISTORS		
VR431	VR (10k)	ACP1025
VR432	VR	VRTS6VS153
VR451	VR (4.7k)	ACP1024
	Other resistors	RD1/8PM□□□J
OTHERS		
	ANTENNA TERMINAL 4-P	AKA1014
	AM RF TUNING BLOCK	AXX1011
X431	CERAMIC FILTER (450kHz)	ATF-125
X471	CRYSTAL RESONATOR (7.200MHz)	ASS1005

Mark No.	Description	Parts No.
AMP ASSEMBLY		
SEMICONDUCTORS		
IC162	PREDRIVER-IC	UPC1270H
Q101, 102	TRANSISTOR	2SC1845
Q103, 104	DUAL TRANSISTOR	2SA1240
Q105, 106	TRANSISTOR	2SA970
Q107, 108	TRANSISTOR	2SA1145
Q109, 110	TRANSISTOR	2SC2705
Q111, 112	TRANSISTOR	2SC2603
Q113, 114	TRANSISTOR	2SC3298
Q115, 116	TRANSISTOR	2SA1306
Q117, 118	TRANSISTOR	2SC2240
Q162, 164	TRANSISTOR	2SC2458
Q201	DUAL TRANSISTOR	2SA1240
Q202	TRANSISTOR	2SC2705
Q203	TRANSISTOR	2SC2603
Q204	TRANSISTOR	2SA1306
Q205	TRANSISTOR	2SC3298
Q206	TRANSISTOR	2SC2240
D101-108	DIODE	HSS104-02
D109, 110	ZENER DIODE	RD10ESB
D111-114	DIODE	HSS104-02
D115, 116	ZENER DIODE	RD10ESB
D117-122	DIODE	HSS104-02
D162, 164	DIODE	HSS104-02
D166	DIODE	HSS104-02
D197, 198	DIODE	D5SB20F
D199, 200	DIODE	HSS104-02
D201	ZENER DIODE	RD10ESB
D202, 203	ZENER DIODE	RD4.3ESB
D204-206	DIODE	HSS104-02
RELAIES		
RY198	RELAY	ASR1035
RY199	RELAY	ASR-112
COILS		
L102-104	COIL	ATH1004
CAPACITORS		
C101, 102	ELECT. CAPACITOR	CEAS4R7M50
C103, 104	CERAMIC CAPACITOR	CKCYB122K50
C105-108	CERAMIC CAPACITOR	CCCSL101J50
C109, 110	CERAMIC CAPACITOR	CCCSL220K500
C111, 112	ELECT. CAPACITOR	CEAS470M16
C113, 114	CERAMIC CAPACITOR	CCCSL050C500
C115, 116	CERAMIC CAPACITOR	CKCYB102K50
C117-120	CERAMIC CAPACITOR	CCCSL151K500
C121, 122	AUDIO FILM CAPACITOR	CFTXA473J50
C123, 124	ELECT. CAPACITOR	CEANP010M100
C125, 126	CERAMIC CAPACITOR	CKCYB222K50
C162	ELECT. CAPACITOR	CEHAQ2R2M50

Mark No.	Description	Parts No.
C166	CERAMIC CAPACITOR	CKCYB222K50
C168	ELECT. CAPACITOR	CEHAQ101M10
C170	CERAMIC CAPACITOR	CCCSL680J50
C172	CERAMIC CAPACITOR	CKCYX333M25
C174	ELECT. CAPACITOR	CEAS100M100
C176	ELECT. CAPACITOR	CEANP2R2M50
C198, 199	ELECT. CAPACITOR (8200/71V)	ACH1204
C200	CKA (0.01/AC250V)	ACG1005
C201	ELECT. CAPACITOR	CEAS2R2M50
C202	CERAMIC CAPACITOR	CKCYB222K50
C203	ELECT. CAPACITOR	CEAS2R2M50
C204, 205	CERAMIC CAPACITOR	CCCSL470J50
C206	CERAMIC CAPACITOR	CKCYB102K50
C207	CERAMIC CAPACITOR	CCCSL560K500
C208	ELECT. CAPACITOR	CEAS470M16
C209	ELECT. CAPACITOR	CEAS470M25
C210	AUDIO FILM CAPACITOR	CFTXA473J50
C211	ELECT. CAPACITOR	CEANP2R2M50
C212	CERAMIC CAPACITOR	CCCSL101K500
C213	CERAMIC CAPACITOR	CKCYB102K50
C222	CERAMIC CAPACITOR	CCCSL101K500
RESISTORS		
R111-114	FUSLIBLE RESISTOR	RFA1/4PS391J
R115, 116	CARBON FILM RESISTER	RD1/4PM152J
R117, 118	CARBON FILM RESISTOR	RD1/4PM473J
R121, 122	CARBON FILM RESISTOR	RD1/4PMF680J
R127, 128	FUSLIBLE RESISTOR	RFA1/4PS470J
R129-136	CARBON FILM RESISTOR	RD1/4PMF101J
R137, 138	FUSLIBLE RESISTOR	RFA1/4PS4R7J
R139-142	CARBON FILM RESISTOR	RD1/4PMF4R7J
R143, 144	FUSLIBLE RESISTOR	RFA1/4PS4R7J
R145, 146	RESISTOR (0.33, 5W)	ACN1087
R147, 148	CARBON FILM RESISTOR	RD1/4PMF100J
R151, 152	METAL OXIDE RESISTOR	RS1LMF100J
R153-156	CARBON FILM RESISTOR	RD1/4PMF222J
R178	RESISTOR (0.22, 2W)	ACN-131
R180, 182	CARBON FILM RESISTOR	RD1/4PMF222J
R197	METAL OXIDE RESISTOR	RS2LMF103J
R198, 199	METAL OXIDE RESISTOR	RS1PMF681J
R207	CARBON FILM RESISTOR	RD1/4PM431J
R208	CARBON FILM RESISTOR	RD1/4PM123J
R210	CARBON FILM RESISTOR	RD1/4PMF470J
R214-217	CARBON FILM RESISTOR	RD1/4PMF101J
R218	RESISTOR (0.33, 5W)	ACN1087
R220	CARBON FILM RESISTOR	RD1/4PMF100J
R221, 222	CARBON FILM RESISTOR	RD1/4PMF222J
R225	CARBON FILM RESISTOR	RD1/4PMF100J
R228	FUSLIBLE RESISTOR	RFA1/4PS4R7J
R230-232	FUSLIBLE RESISTOR	RFA1/4PS4R7J
R233, 234	CARBON FILM RESISTOR	RD1/4PMF4R7J
	Other resistors	RD1/8PM□□□J
OTHERS		
CN29	CONNECTOR (9P)	KPC9
POWER SUPPLY ASSEMBLY		
SEMICONDUCTORS		
IC51	REGULATOR IC	NJM78M56FAS
Q51, 52	TRANSISTOR	2SC2458
Q54-57	TRANSISTOR	2SA1048
Q59	TRANSISTOR	2SA1048
Q60	TRANSISTOR	2SA1145
Q61	TRANSISTOR	XDC143ES
Q62, 63	TRANSISTOR	2SC2458
Q64	TRANSISTOR	XDC124ES
Q65	TRANSISTOR	XDC143ES
Q66	TRANSISTOR	XDC143ES
Q91	TRANSISTOR	2SC2458
D51-56	DIODE	HSS104-02
D58	ZENER DIODE	RD5.1ESB
D59, 60	DIODE	HSS104-02
D61	ZENER DIODE	HZS6A1L
D62	ZENER DIODE	RD6.2ESB
D63-66	DIODE	S5566
D67	ZENER DIODE	RD8.2ESB
D68	DIODE	HSS104-02
D69-72	DIODE	S5566
D73	DIODE	D3SBA20 (A)
D91	DIODE	HSS104-02
RELAY		
RY51	RELAY	ASR1027
TRANSFORMER		
T51	POWER TRANSFORMER	ATT1015

Mark	No.	Description	Parts No.
CAPACITORS			
	C59	ELECT. CAPACITOR	CEAS221M16
	C60	CERAMIC CAPACITOR	CKCYB103K50
	C61	ELECT. CAPACITOR	CEAS100M50
	C62	ELECT. CAPACITOR	CEAS221M16
	C63	ELECT. CAPACITOR	CEAS470M16
	C64	CERAMIC CAPACITOR	CKCYB103K50
	C65	ELECT. CAPACITOR	CEAS102M25
	C66	ELECT. CAPACITOR	CEAS102M35
	C67	ELECT. CAPACITOR	CEAS222M35
	C68, 69	ELECT. CAPACITOR (4700/35V)	ACH1021
	C70	CERAMIC CAPACITOR	CKCYB103K50
	C71	CKA (0.01/AC250V)	ACG1005
⚠	C72, 73	CKA (0.01/AC400V)	ACG1002
	C74	ELECT. CAPACITOR	CEAS470M10
	C75	ELECT. CAPACITOR	CEAS101M35
RESISTORS			
	R200	CARBON FILM RESISTOR	RD1/2PM432J
	R55	METAL OXIDE RESISTOR	RS2LMFR22J
	R56, 57	METAL OXIDE RESISTOR	RS1LMFR22J
	R66	CARBON FILM RESISTOR	RD1/2PM132J
	R75	CARBON FILM RESISTOR	RD1/4PMF101J
	R79	CARBON FILM RESISTOR	RD1/4PM332J
	R80	CARBON FILM RESISTOR	RD1/4PMF4R7J
	R81	CARBON FILM RESISTOR	RD1/4PMFL470J
⚠	R82	RESISTOR (2.2M, 1/2W)	ACN-208
		Other resistors	RD1/8PM□□□J
OTHERS			
⚠		AC OUTLET (3P)	AKP1053
	CN17	CONNECTOR (15P)	KPE15
		JACK (2P)	AKN1006
		JACK (1P)	AKN1020

REAR SP CENTER SP ASSEMBLY

SEMICONDUCTOR			
	Q251	TRANSISTOR	XDC143ES
	D251	DIODE	HSS104-02
RELAY			
	RY251	RELAY	ASR1035
COIL			
	L251	COIL	ATH1004

Mark	No.	Description	Parts No.
CAPACITORS			
	C253	AUDIO FILM CAPACITOR	CFTXA473J50
RESISTORS			
	R255	CARBON FILM RESISTOR	RD1/4PMF100J
	R257	CARBON FILM RESISTOR	RD1/4PMF100J
	R260	METAL OXIDE RESISTOR	RS1LMF681J
OTHERS			
	CN	SPEAKER TERMINAL 2-P	AKE1032
	CN25	CONNECTOR (4P)	KPE4
		SPEAKER TERMINAL 4-P	AKE-109

FRONT SP ASSEMBLY

OTHERS			
		SPEAKER TERMINAL 8-P	AKE-111

SP SW ASSEMBLY

SWITCH			
	S251	PUSH SWITCH	SUJ6LYXS
RESISTORS			
	R252, 253	METAL OXIDE RESISTOR	RS2LMF331J
OTHERS			
		JACK (HEADPHONE)	AKN1002
	CN20	JUMPER CONNECTOR	KPC6

TRANS TERMINAL ASSEMBLY

TRANS TERMINAL assembly has no service parts.

AUDIO FUNCTION ASSEMBLY

SEMICONDUCTORS			
	IC801	OP-AMP-IC	M5220P
	IC802	E-SW IC	TC9164N
	IC803	OP-AMP IC	NJM4558DXP
CAPACITORS			
	C801, 802	ELECT. CAPACITOR	CEAS100M50
	C805, 806	CHIP CERAMIC C.	CCSQCH221J50

Mark	No.	Description	Parts No.
	C807, 808	CHIP CAPACITOR	CCSQSL101J50
	C809, 810	ELECT. CAPACITOR	CEAS470M16
	C811, 812	MYLAR FILM CAPACITOR	CQMA822J50
	C813, 814	MYLAR FILM CAPACITOR	CQMA242J50
	C815, 816	ELECT. CAPACITOR	CEAS2R2M50
	C817, 818	CHIP CAPACITOR	CKSQYF103Z50
	C819, 820	ELECT. CAPACITOR	CEAS101M16
	C841, 842	ELECT. CAPACITOR	CEAS2R2M50
	C843, 844	CHIP CAPACITOR	CKSQYF103Z50
	C845, 846	ELECT. CAPACITOR	CEAS4R7M50
	C847	CHIP CERAMIC C.	CCSQCH471J50
RESISTORS			
		All resistors	RS1/10S□□□J
OTHERS			
	CN11	CONNECTOR (7P)	KPE7
	CN	PIN JACK 4P (TAPE1, 2)	AKB1181
	CN	PIN JACK 4P (PHONO/CD)	AKB1201

A/V FUNCTION ASSEMBLY

SEMICONDUCTORS			
	IC851	E-SW IC	TC9163N
	IC881	VIDEO SWITCH	LA7951
	Q881, 882	TRANSISTOR	2SC2458
CAPACITORS			
	C871, 872	CERAMIC CAPACITOR	CKSQYB103K50
	C873	CHIP CERAMIC C.	CCSQCH471J50
	C881-885	ELECT. CAPACITOR	CEAS470M16
	C886	ELECT. CAPACITOR	CEAS101M16
	C887	CERAMIC CAPACITOR	CKSQYB103K50
	C888-890	ELECT. CAPACITOR	CEAS471M6
	C896, 897	ELECT. CAPACITOR	CEAS101M16
	C898, 899	CERAMIC CAPACITOR	CKSQYB103K50
RESISTORS			
	R890, 894	CARBON FILM RESISTOR	RD1/2PM151J
		Other resistors	RS1/10S□□□J
OTHERS			
		PIN JACK (3P)	AKB1102
		PIN JACK (1P)	AKB1145

CONNECTION ASSEMBLY

SEMICONDUCTORS			
	IC301, 302	OP-AMP IC	NJM4558DXP
	IC303	E-SW IC	TC9162N

Mark	No.	Description	Parts No.
	Q301	TRANSISTOR	2SC2458
	Q302	TRANSISTOR	XDA124ES
	Q303	TRANSISTOR	XDC124ES
	Q304	N-FET	2SK246
CAPACITORS			
	C301-304	ELECT. CAPACITOR	CEAS4R7M50
	C305, 306	CHIP CAPACITOR	CCSQCH680J50
	C307-309	ELECT. CAPACITOR	CEAS4R7M50
	C310	CERAMIC CAPACITOR	CKSQYB103K50
	C311, 312	ELECT. CAPACITOR	CEAS470M16
	C313	CERAMIC CAPACITOR	CKSQYB103K50
	C314	CHIP CERAMIC C.	CCSQCH471J50
	C315	ELECT. CAPACITOR	CEAS470M16
	C316	ELECT. CAPACITOR	CEAS470M10
	C317	CHIP CAPACITOR	CKSQYF103Z50
	C319	ELECT. CAPACITOR	CEAS101M16
	C320	AUDIO FILM CAPACITOR	CFTXA473J50
RESISTORS			
	R327, 328	CARBON FILM RESISTOR	RD1/8PM102J
	R340, 341	CARBON FILM RESISTOR	RD1/8PM100J
	R342	CARBON FILM RESISTER	RD1/8PM4R7J
	R355-357	CARBON FILM RESISTER	RD1/8PM103J
	R358	CARBON FILM RESISTER	RD1/8PM104J
	R359	CARBON FILM RESISTER	RD1/8PM475J
		Other resistors	RS1/10S□□□J
OTHERS			
	CN14	CONNECTOR (6P)	KPE6
	CN15	CONNECTOR (15P)	KPE15

REG (12V) ASSEMBLY

SEMICONDUCTORS			
	IC54	REGULATOR IC	NJM78M12FAS
	IC55	REGULATOR IC	NJM79M12FA
CAPACITORS			
	C52, 53	ELECT. CAPACITOR	CEAS101M35
	C56, 57	CERAMIC CAPACITOR	CKCYF103Z50

REG (5.6V) ASSEMBLY

SEMICONDUCTORS			
	IC52	REGULATOR IC	M5237L
	IC53	REGULATOR IC	NJM78M56FAS
	Q51	TRANSISTOR	2SA1306

Mark	No.	Description	Parts No.
CAPACITORS			
	C51	ELECT. CAPACITOR	CEAS470M16
	C54	CERAMIC CAPACITOR	CKCYF103Z50
	C55	ELECT. CAPACITOR	CEAS101M35
	C58	CERAMIC CAPACITOR	CKCYX104M25
	C76	ELECT. CAPACITOR	CEAS010M50
RESISTORS			
	R51	METAL OXIDE RESISTOR	RS1LMF100J
	R83	CARBON FILM RESISTOR	RD1/4PMF221J
	R84	CARBON FILM RESISTOR	RD1/4PM363J
	R85	CARBON FILM RESISTOR	RD1/8PM432J
VOLUME ASSEMBLY			
SEMICONDUCTORS			
	IC501, 502	OP-AMP IC	NJM4558DXP
	IC503	MECHANISM DRIVER IC	TA8409S
	IC521	OP-AMP IC	NJM4558DXP
	IC522	E-VR IC	TC9154AP
	IC523	OP-AMP IC	NJM4558DXP
	IC561	OP-AMP IC	M5220L
	IC562	E-VR IC	TC9154AP
	IC563	E-TONE CONTROL IC	TC9184P
	IC564	OP-AMP IC	M5220L
	Q501	TRANSISTOR	XDC124ES
	D501, 502	ZENER DIODE	RD5.1ESB2
	D503, 504	DIODE	HSS104-02
	D505	ZENER DIODE	RD5.1ESB2
	D506	ZENER DIODE	RD3.3ESB2
	D521-524	DIODE	HSS104-02
	D561-566	DIODE	HSS104-02
CAPACITORS			
	C501, 502	ELECT. CAPACITOR	CEAS470M10
	C503, 504	ELECT. CAPACITOR	CEAS4R7M50
	C505, 506	CERAMIC CAPACITOR	CKSQYB103K50
	C507, 508	CHIP CAPACITOR	CCSQCH331J50
	C509, 510	ELECT. CAPACITOR	CEAS4R7M50
	C511	ELECT. CAPACITOR	CEANP101M10
	C512	ELECT. CAPACITOR	CEAS101M16
	C513	ELECT. CAPACITOR	CEAS6R8M50
	C514	CHIP CAPACITOR	CCSQCH101J50
	C515	ELECT. CAPACITOR	CEASR47M50
	C516	ELECT. CAPACITOR	CEAS4R7M50
	C521, 522	ELECT. CAPACITOR	CEAS4R7M50
	C523, 524	CERAMIC CAPACITOR	CKSQYB103K50
	C525, 526	CHIP CAPACITOR	CCSQCH470J50
	C527, 528	ELECT. CAPACITOR	CEAS4R7M50
	C531, 532	ELECT. CAPACITOR	CEAS4R7M50
	C533, 534	CERAMIC CAPACITOR	CKSQYB103K50
	C535, 536	CHIP CAPACITOR	CCSQCH470J50
	C539	CERAMIC CAPACITOR	CKSQYB471K50
	C550, 551	ELECT. CAPACITOR	CEAS4R7M50
	C553	ELECT. CAPACITOR	CEAS4R7M50
	C559, 560	CHIP CAPACITOR	CCSQCH331J50
	C561, 562	ELECT. CAPACITOR	CEAS2R2M50
	C563, 564	CHIP CAPACITOR	CKSQYF103Z50
	C565, 566	ELECT. CAPACITOR	CEAS010M50
	C567, 568	CHIP CAPACITOR	CCSQCH121J50
	C569, 570	ELECT. CAPACITOR	CEAS100M50
	C571, 572	MYLAR FILM CAPACITOR	CQMA153J50
	C573, 574	MYLAR FILM CAPACITOR	CQMA823J50
	C575, 576	MYLAR FILM CAPACITOR	CQMA272J50
	C577, 578	MYLAR FILM CAPACITOR	CQMA153J50
	C579, 580	ELECT. CAPACITOR	CEAS4R7M50
	C581, 582	CHIP CAPACITOR	CKSQYF103Z50
	C585	CHIP CAPACITOR	CKSQYB102K50
	C586, 587	CHIP CAPACITOR	CKSQYF103Z50
RESISTORS			
	VR501	VARIABLE RESISTOR	ACX1074
	R501, 502	CARBON FILM RESISTOR	RD1/4PM6S1J
	R507	CARBON FILM RESISTOR	RD1/8PM821J
	R517	CARBON FILM RESISTOR	RD1/2PM470J
		Other resistors	RS1/10S□□□J
OTHERS			
	CN16	CONNECTOR (11P)	KPE11
	CN18	CONNECTOR (9P)	KPE9
FL. U-COM ASSEMBLY			
SEMICONDUCTORS			
	IC601	CONTROL MCU	PDC083A
	Q601-604	TRANSISTOR	2SC2458
	Q606	TRANSISTOR	XDC124ES
	D601-603	DIODE	HSS104-02
	D604	LED (RED)	AEL1108
	D607-625	DIODE	HSS104-02
	D628-631	DIODE	HSS104-02
	D633	DIODE	HSS104-02
SWITCHES			
	S601	SWITCH	ASG1034
	S603-609	SWITCH	ASG1034
	S611-629	SWITCH	ASG1034
	S631-643	SWITCH	ASG1034
	S645-647	SWITCH	ASG1034
	S649-651	SWITCH	ASG1034
	S653-655	SWITCH	ASG1034
	S657-659	SWITCH	ASG1034
COIL			
	L601	AXIAL INDUCTOR	LAU220K
CAPACITORS			
	C601	CAPACITOR (47/5.5V)	ACH1135
	C602	ELECT. CAPACITOR	CEAS100M50
	C603	CERAMIC CAPACITOR	CKCYX473M25
	C604	AXIAL CERAMIC C.	CKPUYF473Z16
	C605	ELECT. CAPACITOR	CEAS101M10
	C606	ELECT. CAPACITOR	CEAS010M50
	C607	AXIAL CERAMIC C.	CKPUYF223Z25
	C608	ELECT. CAPACITOR	CEAS470M50
RESISTORS			
		All resistors	RD1/8PM□□□J
OTHERS			
		FL SPACER	AEB1120
		REMOTE RECEIVER UNIT	AXX1023
	V601	FL TUBE	AAV1145
	X602	CRYSTAL RESONATOR (8.00MHz)	ASS1015
DOL. PRO. MOD. ASSEMBLY			
SEMICONDUCTORS			
	IC1901	DOLBY PROLOGIC IC	LA2780
	IC1902	DOLBY SURRUND IC	LV1001M-A
	IC1903	DRAM IC	LM3364K-15
	IC1904, 1905	OP-AMP IC	NJM4558M-D
	IC1906	PORT-EXPANDER IC	M66320FP
	Q1901	TRANSISTOR	DTA143EK
	Q1902	DIGITAL TRANSISTOR	DTC143EK
	Q1903	TRANSISTOR	2SD438
	D1901-1905	DIODE	1SS226
CAPACITORS			
	C1901	ELECT. CAPACITOR	CEAS470M25
	C1902	ELECT. CAPACITOR	CEAS101M10
	C1903, 1904	ELECT. CAPACITOR	CEAS100M50
	C1905	ELECT. CAPACITOR	CEYAR33M50
	C1906	CHIP CAPACITOR	CCSQCH681J50
	C1907, 1908	AUDIO FILM CAPACITOR	CFTXA104J50
	C1909, 1910	ELECT. CAPACITOR	CEYA2R2M50
	C1911	ELECT. CAPACITOR	CEASR15M50
	C1912	ELECT. CAPACITOR	CEYA3R3M50
	C1913, 1914	AUDIO FILM CAPACITOR	CFTXA154J50
	C1915	ELECT. CAPACITOR	CEYA3R3M50
	C1916	ELECT. CAPACITOR	CEASR15M50
	C1917, 1918	ELECT. CAPACITOR	CEYA2R2M50
	C1919	AUDIO FILM CAPACITOR	CFTXA473J50
	C1920	AUDIO FILM CAPACITOR	CFTXA104J50
	C1921	AUDIO FILM CAPADITOR	CFTXA334J50
	C1922	CHIP CAPACITOR	CCSQCH681J50
	C1923, 1924	AUDIO FILM CAPACITOR	CFTXA104J50
	C1925	ELECT. CAPACITOR	CEYAR33M50
	C1926, 1927	ELECT. CAPACITOR	CEAS100M50
	C1928, 1929	ELECT. CAPACITOR	CEAS220M16
	C1930, 1931	ELECT. CAPACITOR	CEAS2R2M50
	C1932	AUDIO FILM CAPACITOR	CFTXA153J50
	C1933	AUDIO FILM CAPACITOR	CFTXA103J50
	C1934	CHIP CAPACITOR	CCSQCH681J50
	C1935	AUDIO FILM CAPACITOR	CFTXA104J50
	C1936	ELECT. CAPACITOR	CEAS471M16
	C1937	ELECT. CAPACITOR	CEAS4R7M50
	C1938	CHIP CAPACITOR	CCSCH102J50
	C1939	AUDIO FILM CAPACITOR	CFTXA223J50
	C1940	CHIP CAPACITOR	CCSQCH151J50
	C1941-1943	ELECT. CAPACITOR	CEAS221M16
	C1944	CERAMIC CAPACITOR	CKSQYF104Z50
	C1945	ELECT. CAPACITOR	CEASR22M50
	C1946	AUDIO FILM CAPACITOR	CFTXA683J50
	C1947	MYLAR FILM CAPACITOR	CQMA392J50
	C1948	MYLAR FILM CAPACITOR	CQMA472J50
	C1949	AUDIO FILM CAPACITOR	CFTXA333J50
	C1950	ELECT. CAPACITOR	CEANP100M35
	C1951	ELECT. CAPACITOR	CEAS010M50
	C1952	ELECT. CAPACITOR	CEAS100M50
	C1953	CHIP CERAMIC C.	CCSQCH471J50
	C1954	MYLAR FILM CAPACITOR	CQMA562J50
	C1955	MYLAR FILM CAPACITOR	CQMA682J50
	C1956	ELECT. CAPACITOR	CEANPR33M50
	C1957, 1958	ELECT. CAPACITOR	CEAS100M50
	C1959	CHIP CAPACITOR	CCSQCH681J50
	C1960	ELECT. CAPACITOR	CEAS100M50

Mark	No.	Description	Parts No.
	C1961	AUDIO FILM CAPACITOR	CFTXA154J50
	C1962	CHIP CAPACITOR	CCSQCH151J50
	C1963	AUDIO FILM CAPACITOR	CFTXA223J50
	C1964	CHIP CAPACITOR	CCSCH102J50
	C1965	ELECT. CAPACITOR	CEAS4R7M50
	C1966	CERAMIC CAPACITOR	CKSQYF104Z50
	C1967	CERAMIC CAPACITOR	CKSQYB103K50
	C1968	ELECT. CAPACITOR	CEAS221M10
	C1970	CERAMIC CAPACITOR	CKSQYB562K50
	C1971 – 1973	CHIP CAPACITOR	CCSQCH101J50
RESISTORS			
	VR1901	VR (47k)	ACP1045
		Other resistors	RS1/10S□□□J
OTHERS			
	X1901	CRYSTAL RESONATOR (8.00MHz)	ASS1015

7. ADJUSTMENTS

7.1 TUNER SECTION

1. Wiring ····· Connect the wires as shown in Fig. 7 – 1 (FM ANT. terminal : 75Ω).
2. Preset ····· Set the VR451 to center position.
3. When the SD model is used, set the band select switch to AM : 10kHz/FM : 100kHz.

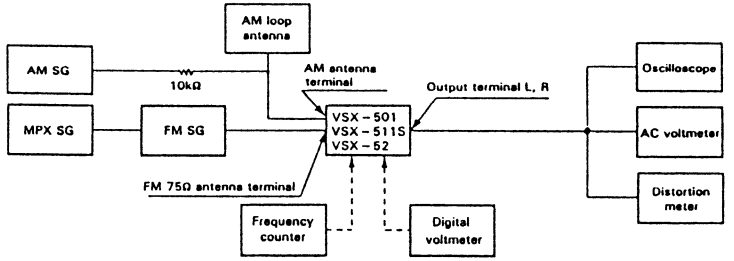


Fig. 7 – 1 AM and FM adjustment wiring diagram

Note : Stereo modulation Main 1kHz L+R ±68.25kHz
Pilot 19kHz±6.75kHz

FM Section

Order	Item	SSG			Receiving frequency	Adjustment	
		Frequency	Modulation	Level		Adjustment location	Remarks
1	Checking front end VT	No signal			108MHz	—	Check that the voltage between terminal 41 and GND is 8.7±2.0V.
2	Checking front end VT				87.5MHz	—	Check that the voltage between terminal 41 and GND is 3.4±1.5V.
3	Increasing front end sensitivity	98MHz		Weak input	98MHz	L402, L404, T402	Set the the voltage between terminal 43 and GND to maximum, and check that the practical sensitivity is as specified. (8dBμV/75Ω or less)
4	Center adjustment	98MHz		60dBμV	98MHz	L431	Adjust the voltage between terminals 45 and 46 to 0±50mV.
5	Checking monophonic distortion	98MHz	1kHz ±75kHz dev.	60dBμV	98MHz	—	Check that the monophonic distortion is as specified. (0.8% or less)
6	Adjusting VCO		OFF	60dBμV		VR451	Adjust the output of terminal 44 to 76.0kHz±1.0kHz.
7	Adjusting stereo distortion	98MHz	L-ONLY R-ONLY	60dBμV	98MHz	T402	Minimize the distortion within 1/4 rotation of the core, and check conformity to the specification. (1%)
8	Checking separation	98MHz	L-ONLY R-ONLY	60dBμV	98MHz	—	Check that the seperation of L → R and R → L is as specified. *1
9	Checking lighting levels of TUNED and STEREO IND.	98MHz	STEREO	10dBμV (+4dB, −4dB)	98MHz	VR432	Adjust TUNED and STEREO IND. to start lighting.

*1 : More than 30dB.

AM Section

Order	Item	SSG			Receiving frequency	Adjustment	
		Frequency	Modulation	Level		Adjustment location	Remarks
1	Checking front end VT	No signal			1700kHz	—	Check that the voltage between terminal 41 and GND is 7.5±1.0V.
2	Checking front end VT				530kHz	—	Check that the voltage between terminal 41 and GND is 1.5±0.5V.
3	Checking front end sensitivity	1000kHz	400kHz 30% MOD.	Practical sensitivity level	1000kHz	—	Check that the practical sensitivity (maximum sensitivity) is as specified. *2
4	Adjusting lighting level of TUNED IND.	1000kHz			1000kHz	VR431	Adjust the lighting level of TUNED IND. to 55dBμV/m±3dB.

*2 : 60dBμV/m or less.

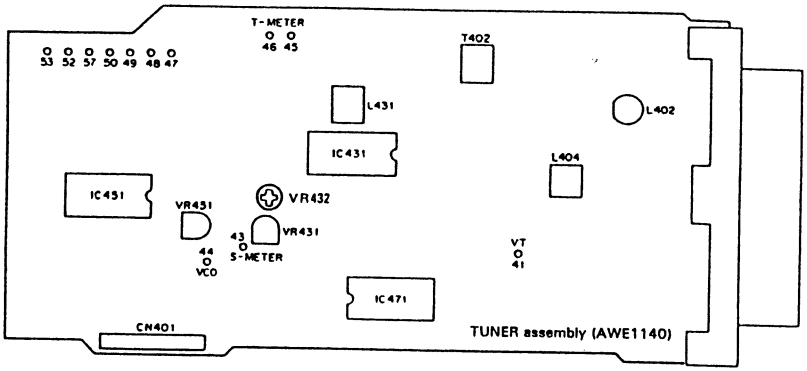


Fig. 7−2 Adjustment points

7.2 SURROUND SECTION

Dolby Level Adjustment

Set the switches as follows :

- SURROUND MODE : STUDIO
- DELAY TIME : 20m Sec.
- INPUT SELECTOR : CD

1. Input a signal of 1kHz at 300mV to the Lch side of the CD terminal.
2. Adjust the input level so that Pin ⑮ of the CN1901 connector becomes 300mVrms (=0dB).
3. Adjust VR1901 so that the output level of Pin ① (DELAY OUT) of the CN1901 connector becomes −0.5dB±1dB.

7.3 OSD ASSEMBLY SECTION (VSX−52 ONLY)

7.3.1 Adjusting H. SYNC and V. SYNC for Superimposed Display.

1. Adjust the VR1102 so that the application of power without any signal causes the OSD assembly's JP (H) to show a frequency of 15.75kHz±50Hz.
2. Adjust the VR1101 so that the application of power without any signal causes the OSD assembly's JP (V) to show a frequency of 53Hz±1Hz.

7.3.2 Adjusting the Superimposed Display in the Center

- Connect the VIDEO OUT (TO MONITOR TV) terminal to a monitor TV.

1. Turn the SIMULATED STEREO switch ON.
2. Then, turn the SIMULATED STEREO switch OFF.
3. Then adjust the TC1101 to center the superimposed display " SIMULATED STEREO OFF ", leaving equal margin on both right and left of the TV screen.

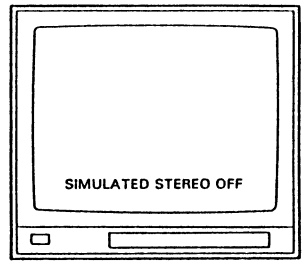
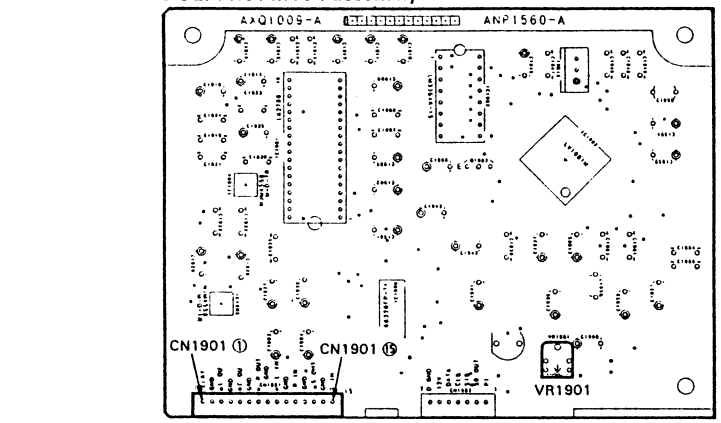


Fig. 7−3

DOL. PRO. MOD. assembly



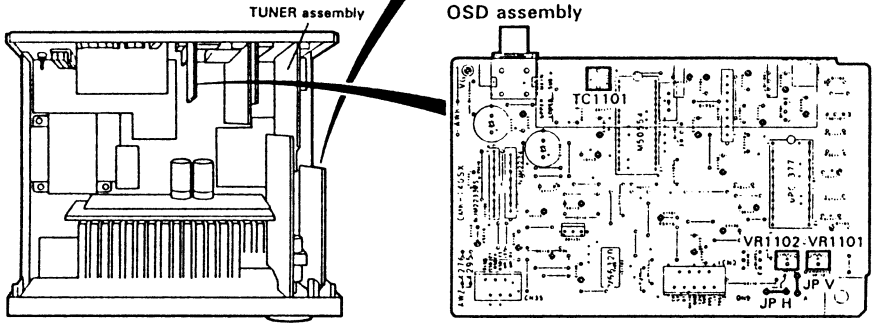


Fig. 7-4 Adjustment points

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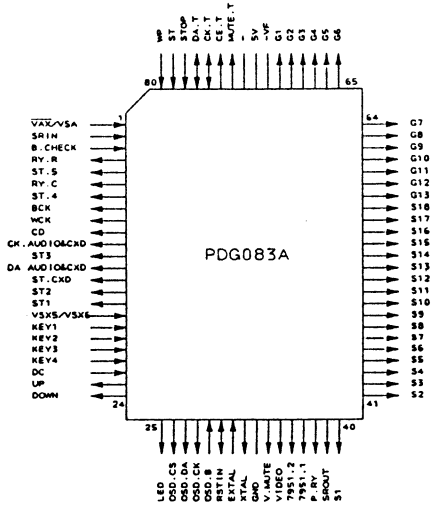
8. IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ PDG083A (IC601)

- **System Control Micro-computer**
- Pin Assignment (Top View)



- Pin Function

No.	Terminal Name	I/O	Description
1	VSX/VSA	I	Port for switching between VSX and VSA.
2	SR IN	I	Remote control signal input from the SR IN terminal or the light receiving unit.
3	B-Check	I	Remote control signal input from the MR IN terminal. The system detects remote control operation SUB ROOM when the signal is input.
4	RY-Rear	O	Rear relay ON/OFF
5	ST. 5	O	Strobe to operate the rear electronic VR.
6	RY-Center	O	Center relay ON/OFF
7	ST. 4	O	Strobe to operate the front balance and tone.
8	BCK	O	DSP IC bit clock
9	WCK	O	DSP IC word clock
10	CD	O	DSP IC data
11	CK. AUDIO & CXD	O	Clock for the audio system and the port expander.
12	ST. 3	O	Strobe to operate the surround and center electronic VRs.
13	DA. AUDIO & CXD	O	Data for the audio system and the port expander.
14	ST. CXD	O	Strobe for the port expander.
15	ST. 2	O	Strobe for subfunction, multiroom VR and analog surround SW.
16	ST. 1	O	Strobe for main function and DSP surround SW.
17	SX5/VSX6	I	Port for switching between VSX-5 (VSX-501, VSX-511S) and VSX-6 (VSX-D601).
18	KEY IN 1	I	KEY MATRIX return input
19	KEY IN 2	I	
20	KEY IN 3	I	
21	KEY IN 4	I	
22	DC	I	Detection of the VR position (VR MAX : 5V, VR MIN : 0V) of AUDIO SOURCE CONTROL and conversion of A/D.
23	UP	O	VR : UP when using remote control.
24	DOWN	O	VR : DOWN when using remote control.
25	LED	O	VR knob LED ON/OFF during remote control operation.
26	OSD. CS	O	CHIP SELECT to OSD IC M50554.
27	OSD. DA	O	Data to OSD IC.
28	OSD. CK	O	Clock to OSD IC.
29	OSD. BLUE	I	When OSD is installed, the system detects input of video signal from the UPC1377 synchronous separation IC and transfers the signal to H/L. Then the system determines whether the signal is BLUE BACK or VIDEO SIGNAL (so-called Reset).

No.	Terminal Name	I/O	Description
30	$\overline{\text{RST}}$ IN	I/O	Reset
31	EXTAL	I	Oscillator IN/OUT
32	XTAL	O	
33	GND	—	GND
34	V. MUTE	O	To the MUTE terminal of LA7951 used for MUTE and FUNCTION of the video signal.
35	VIDEO	O	Switches between VIDEO and TV when front video input is added (NJM2233).
36	LA7951. 2	O	2-bit control terminal of LA7951 (video function).
37	LA7951. 1	O	
38	P. RY	O	Power relay and turning the standby LED to ON/OFF.
39	SR OUT	O	Sends SR signal of multiple devices during AUDIO SOURCE CONTROL.
40	SEG1/KEY1	O	Display segment and KEY MATRIX output.
41	SEG2/KEY2	O	
42	SEG3/KEY3	O	
43	SEG4/KEY4	O	
44	SEG5/KEY5	O	
45	SEG6/KEY6	O	
46	SEG7/KEY7	O	
47	SEG8/KEY8	O	
48	SEG9/KEY9	O	
49	SEG10/KEY10	O	
50	SEG11/KEY11	O	
51	SEG12/KEY12	O	
52	SEG13/KEY13	O	
53	SEG14/KEY14	O	
54	SEG15/KEY15	O	
55	SEG 16	O	Display segment
56	SEG 17	O	
57	SEG 18	O	

No.	Terminal Name	I/O	Description
58	GRID 13	O	Display grid
59	GRID 12	O	
60	GRID 11	O	
61	GRID 10	O	
62	GRID 9	O	
63	GRID 8	O	
64	GRID 7	O	
65	GRID 6	O	
66	GRID 5	O	
67	GRID 4	O	
68	GRID 3	O	
69	GRID 2	O	
70	GRID 1	O	
71	−VF	—	FL negative voltage −VFDP
72	+5V(VDD)	—	Positive power supply
73	—	—	NC
74	MUTE. T	O	TUNER output mute
75	CE. T	O	TUNER chip enable
76	CK. T	I/O	TUNER clock
77	DA. T	I/O	TUNER data
78	STOP (TUNED)	I	Control signal sent from IC when performing tuning. The TUNED FL indicator lights up when the system detects the signal.
79	STEREO	I	Signal sent from IC when the system is in the STEREO mode. The STEREO indicator lights up when the system detects the signal.
80	AC Wake Up	I	AC short break detection report

9. REMOTE CONTROL UNIT [CU – VSX045 (AXD1270)]

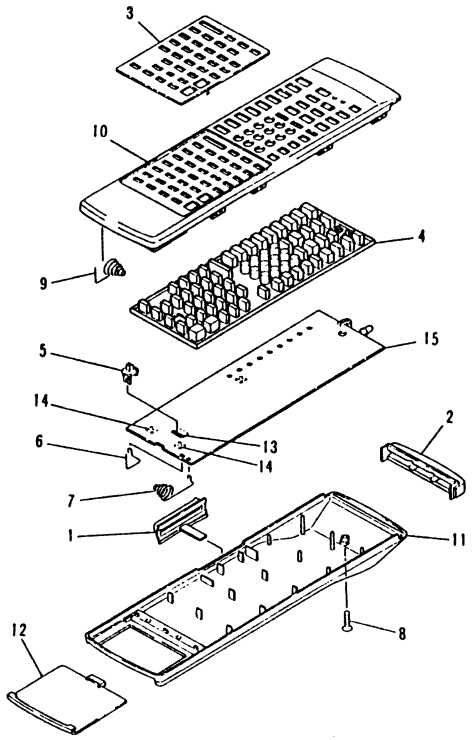
9.1 EXPLODED VIEW AND PARTS LIST

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Exterior

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE	AZA1369
	4	RUBBER SHEET	AZA1364
	5	KNOB	AZA1349
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (–)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2089
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW	AZS1117
	14	TACT SW	AZS1118
NSP	15	P. C. BOARD	AZW1130



9.2 ELECTRICAL PARTS LIST

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 ..... RD1/8PM 5 6 1 J
47kΩ → 47 × 10³ → 473 ..... RD1/4PS 4 7 3 J
0.5Ω → 0R5 ..... RN2H 0 R 5 K
1Ω → 010 ..... RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10¹ → 5621 ..... RN1/4PC 5 6 2 1 F

Parts list of AXD1270

Mark	No.	Description	Parts No.
SEMICONDUCTORS			
	IC1	μ–COM	ACM001–029
	IC2	IC	AZC1564
	IC3	LOGIC IC	MC74HC138F
	Q1, 2	CHIP TRANSISTOR	2SC3052E
	Q3, 4	TRANSISTOR	2SD1622
	D1	DIODE	DWA010–TE
	D10–17	LED	AZC1573
	D2–6	DIODE	DWA010–TE
	D7	LED	SLR–938C
	D8	DIODE	SPS–503C–3
	D9	LED	AZC1573
CAPACITORS			
	C1, 2	CERAMIC CAPACITOR	CCDSL330J50
	C3	CERAMIC CAPACITOR	CCDSL221J50
	C4	CERAMIC CAPACITOR	CKDYX104M25
	C5	ELECT. CAPACITOR	CEAS470M10
	C6	CERAMIC CAPACITOR	CKDYB103K50
	C7	ELECT. CAPACITOR	CEAS221M10
	C8	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS			
	R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	AZC1570

9.3 SCHEMATIC DIAGRAM

NOTE)

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

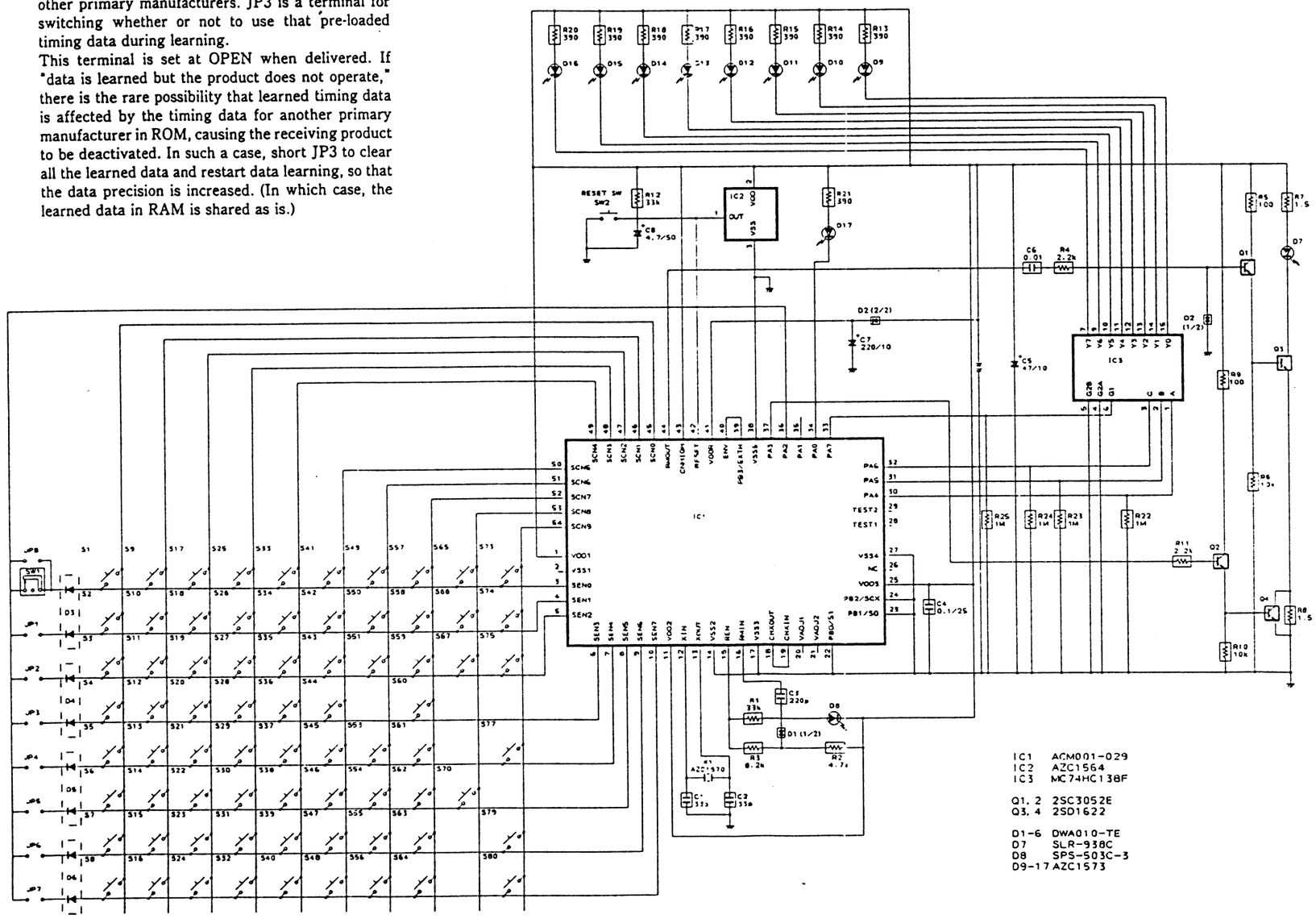
JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.
This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

NOTE
- : Indicates a chipresistor.
- : Indicates a chipcapacitor.
- : Indicates a chiptransistor.
- : Indicates a chipdiode.

Note: (Type 2)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or μF unless otherwise noted.
   Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or μH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   : DC voltage (V) at no input signal unless otherwise noted.
   ⇨ mA or ⇦ mA : DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ : Adjusting point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SWITCHES (Underline indicates switch position):**

SW1 CENT. · BAL. / REAR · REAR BAL.
SW2 RESET
S1 VCR1
S2 VCR2
S3 LD
S4 TV
S5 CD
S6 TUNER
S7 DECK I
S8 DECK II
S9 DAT
S10 MODE CHECK
S11 LEARN
S12 EDIT
S13 MULTI COMMAND
S14 M.CLEAR
S15 POWER
S16 ⏮
S17 REC
S18 ⏭
S19 ⏪
S20 ◀ (SEARCH)
S21 ⏩
S22 ⏸
S23 ■
S24 ▶
S25 TV/VCR (+10)
S26 SELECT (DISP)
S27 TV FUNC (BAND)
S28 1
S29 2
S30 3
S31 4
S32 5
S33 6
S34 7
S35 8
S36 9
S37 10/0
S38 11/PGM
S39 12/CLEAR
S40 CUSTOM (TV VOL+)
S41 SCAN (TV VOL−)
S42 FREQ CH (∧)
S43 FREQ CH (∨)
S44 RECEIVER POWER
S45 AUTO SOURCE CONTROL 1
S46 AUTO SOURCE CONTROL 2
S47 SLEEP
S48 VCR1
S49 VCR2
S50 LD
S51 TV
S53 TAPE1/DAT
S54 TAPE2/MONITOR
S55 CD
S56 TUNER
S57 PHONO
S58 SIMULATED STEREO
S59 ACOUSTIC
S60 V. SEL
S61 DISPLAY
S62 RETURN
S63 SURR MODE
S64 3CH LOGIC
S65 CENTER MODE
S66 TEST TONE
S67 MUTING
S70 CENTER +
S73 REAR L
S74 REAR R
S75 DELAY TIME
S77 CENTER −
S79 MASTER VOLUME +
S80 MASTER VOLUME −



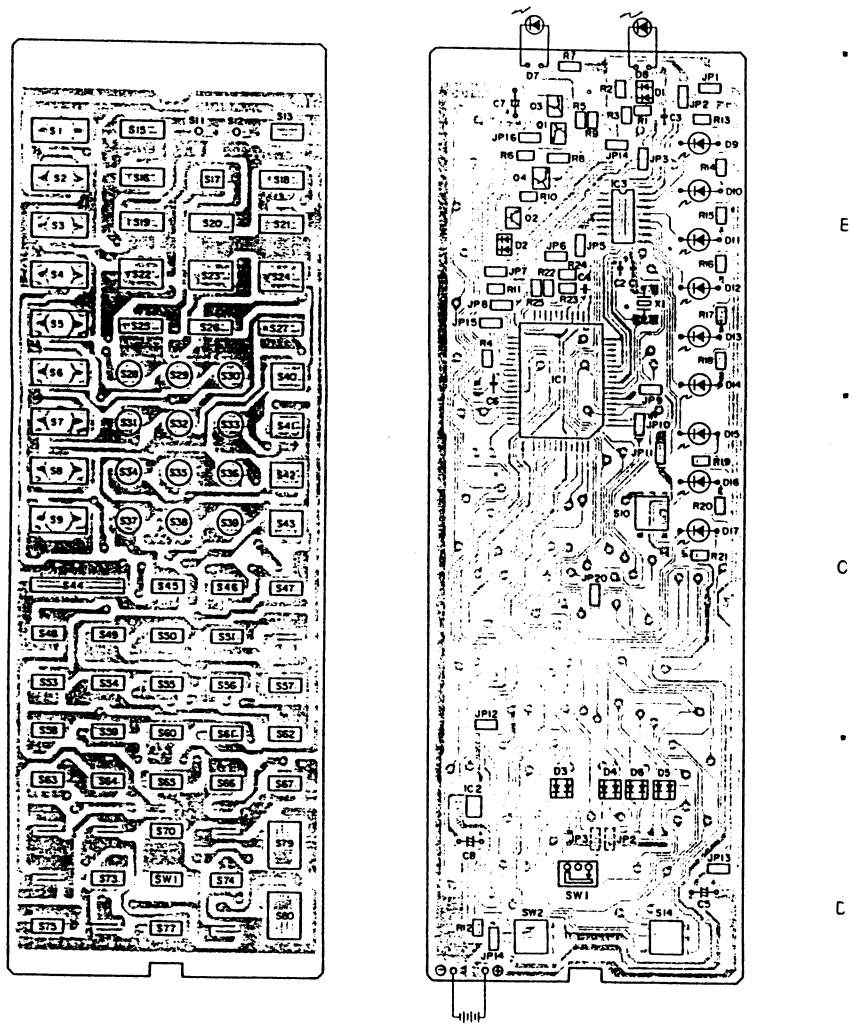
9.4 P. C. BOARD PATTERN

: Indicates a chip resistor.

: Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.



10. FOR VSX – 501/SD, VSX – 511S/KU, KC AND VSX – 52/KU TYPES

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

10.1 CONTRAST OF MISCELLANEOUS PARTS

VSX – 501/SD, VSX – 511S/KU, KC, VSX – 52/KU and VSX – 501/KU have the same construction except for the following :

Mark	Symbol & Description	Part No.					Remarks
		VSX – 501/ KU	VSX – 501/ SD	VSX – 511S/ KU	VSX – 511S/ KC	VSX – 52/ KU	
◉	AMP assembly	AWZ4254	AWZ4254	AWZ4254	AWZ4254	AWZ4258	
◉	POWER SUPPLY assembly	AWZ4255	AWZ4255	AWZ4255	AWZ4255	AWZ4259	
◉	REAR SP CENTER SP assembly	AWZ4256	AWZ4256	AWZ4256	AWZ4256	AWZ4260	
NSP	FRONT SP assembly	AWZ4257	AWZ4257	AWZ4257	AWZ4257	AWZ4261	
◉	SP SW assembly	AWZ4262	AWZ4262	AWZ4262	AWZ4262	AWZ4289	*1
◉	AUDIO FUNCTION assembly	AWZ4263	AWZ4263	AWZ4263	AWZ4263	AWZ4270	
◉	A/V FUNCTION assembly	AWZ4264	AWZ4264	AWZ4264	AWZ4264	AWZ4271	
◉	VOLUME assembly	AWZ4269	AWZ4269	AWZ4269	AWZ4269	AWZ4273	
NSP	PRE OUT TERMINAL assembly	.....	.....	.....	.....	AWZ4272	
◉	FL. U – COM assembly	AWK1556	AWK1556	AWK1556	AWK1556	AWK1544	
◉	MR & S assembly	.....	.....	.....	.....	AWZ4275	
◉	OSD assembly	.....	.....	.....	.....	AWZ4276	
⚠	S1 Voltage selector (AC110V/120 – 127V/220V/240V)	.....	AKX – 507	.....	.....	.....	
⚠	S2 Voltage selector (AC110V – 127V/220V – 240V)	.....	AKX1004	.....	.....	.....	
⚠	S3 Slide switch (9k/10k)	.....	ASH – 004	.....	.....	.....	
⚠	T1 Power transformer (AC120V)	ATS1424	.....	ATS1424	ATS1424	ATS1424	
⚠	T1 Power transformer (AC110V/120 – 127V/220V/240V)	.....	ATS1425	.....	.....	.....	
⚠	FU1 Fuse (8A/125V)	AEK1002	.....	AEK1002	AEK1002	AEK1002	
⚠	FU1 Fuse (4A/125V)	.....	AEK – 125	.....	.....	.....	
⚠	FU2 Fuse (4A/125V)	.....	AEK – 125	.....	.....	.....	
⚠	FU7 Fuse (8A/125V)	.....	.....	.....	AEK1002	.....	
⚠	AC Power cord	ADG1058	ADG1051	ADG1058	ADG1058	ADG1058	
⚠	Strain relief	AEP – 113	AEC – 882	AEP – 113	AEP – 113	AEP – 113	
	Master VOL assembly	AAB1207	AAB1207	AAB1207	AAB1207	AAB1119	
	Button (Balance, Treble, Bass, Delay time)	AAD2279	AAD2279	AAD2279	AAD2279	AAD2271	
	Kuro button (Dolby mode, Dolby 3CH logic)	AAD2274	AAD2274	AAD2274	AAD2274	.....	
	Kin button (Dolby mode, Dolby 3CH logic)	.....	.....	.....	.....	AAD2273	
	Lens (For MR & S knob)	.....	.....	.....	.....	AAK2144	

**1 : Although AWZ4289 and AWZ4262 are different in part number, they have the same service parts.*

Mark	Symbol & Description	Part No.					Remarks
		VSX – 501/ KU	VSX – 501/ SD	VSX – 511S/ KU	VSX – 511S/ KC	VSX – 52/ KU	
	Display panel	AAK2324	AAK2324	AAK2324	AAK2324	AAK2295	
	Name plate	AAM1029	AAM1029	AAM1029	AAM1029	AAM1001	
	Front panel	AMB1987	AMB1987	AMB1988	AMB1988	AMB1989	
	Side panel	.....	.....	.....	.....	AMR2419	
	Side plate (Rubber)	.....	.....	.....	.....	AAP1264	
NSP	Rear panel	ANC1893	ANC1892	ANC1893	ANC1893	ANC1895	
	Screw	.....	VMZ26P040FZK	.....	.....	.....	For Side SW S3
	Screw	.....	.....	.....	.....	ABA1148	For Side panel
NSP	Spacer	.....	.....	.....	.....	AEC1430	
NSP	PCB holder	ANG – 502	ANG – 502	ANG – 502	ANG – 502	.....	
	Front rear pad	AHA1503	AHA1503	AHA1503	AHA1503	.....	
	Front pad	.....	.....	.....	.....	AHA1504	
	Rear pad	.....	.....	.....	.....	AHA1505	
	Packing case	AHD2285	AHD2286	AHD2284	AHD2284	AHD2283	
	Operating instructions (English)	ARB1378	ARB1378	ARB1378	ARB1378	ARB1379	
	Operating instructions (Spanish)	.....	ARC1362	.....	.....	.....	
	Operating instructions (French)	.....	.....	.....	ARC1363	.....	
	Remote control unit (CU – VSX046)	AXD1263	AXD1263	.....	.....	.....	
	Remote control unit (CU – VSX045)	.....	.....	AXD1270	AXD1270	AXD1270	
	Battery cover	PZN – 001	PZN – 001	.....	.....	.....	
NSP	Battery (R03, AAA)	AEX – 021	AEX – 021	.....	.....	.....	
NSP	Battery (LR6, AA)	.....	.....	AEX1007	AEX1007	AEX1007	

AMP ASSEMBLY

AMP assembly (AWZ4258) and AMP assembly (AWZ4254) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4254	AWZ4258	
	C198 (8200/71V	ACH1204	ACH1224	
	C199 (8200/71V)	ACH1204	ACH1225	

POWER SUPPLY ASSEMBLY

POWER SUPPLY assembly (AWZ4259) and POWER SUPPLY assembly (AWZ4255) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4255	AWZ4259	
	Q58	.....	2SA1048	
	Q92	.....	2SC2458	
	D57	.....	HSS104 – 02	
	R64, R67	.....	RD1/8PM224J	
	R91	.....	RD1/8PM562J	
	R92	.....	RD1/8PM622J	

REAR SP CENTER SP ASSEMBLY

REAR SP CENTER SP assembly (AWZ4260) and REAR SP CENTER SP assembly (AWZ4256) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4256	AWZ4260	
	Q253	.....	XDC143ES	
	D253	.....	HSS104-02	
	RY253	.....	ASR1035	
	R268	.....	RD1/8PM333J	
	R269	.....	RS1LMF681J	
	R271, R273	.....	RD1/8PM222J	
	R272	.....	RD1/8PM473J	
	Speaker terminal 4-P	AKE-109	.....	
	Speaker terminal 8-P	.....	AKE-111	
	Pin jack 3P	.....	AKB1120	

VOLUME ASSEMBLY

VOLUME assembly (AWZ4273) and VOLUME assembly (AWZ4269) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4269	AWZ4273	
	IC526	.....	XRU4066B	
	Q521	.....	XDA124ES	
	Q522, Q523	.....	XDC124ES	
	C537, C538	.....	CEAS4R7M50	
	R535, R536, R551, R552	.....	RS1/10S474J	
	R550, R553	.....	RS1/10S103J	

AUDIO FUNCTION ASSEMBLY

AUDIO FUNCTION assembly (AWZ4270) and AUDIO FUNCTION assembly (AWZ4263) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4263	AWZ4270	
	Pin jack 4P (PHONO/ CD)	AKB1201	.....	
	Pin jack 2P (CD)	.....	AKB1155	
	Pin jack 3P (PHONO)	.....	AKB1167	

VSX-501, VSX-511S, VSX-52

FL. U-COM ASSEMBLY

FL. U-COM assembly (AWK1544) and FL. U-COM assembly (AWK1556) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWK1556	AWK1544	
	Q605	.....	2SC2458	
	D605, D606	.....	AEL1113	
	D626, D627	.....	HSS104-02	
	S602, S610	.....	ASG1034	OSD SELECT, MR & S
	R609	.....	RD1/8PM103J	
	R610	.....	RD1/4PM750J	

FRONT SP ASSEMBLY

FRONT SP assembly (AWZ4261) and FRONT SP assembly (AWZ4257) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4257	AWZ4261	
	Speaker terminal 8-P	AKE-111	AKE1011	

A/V FUNCTION ASSEMBLY

A/V FUNCTION assembly (AWZ4271) and A/V FUNCTION assembly (AWZ4264) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4264	AWZ4271	
	IC883	.....	LA7952	
	L851-L854	.....	LAU680K	
	C888	CEAS471M6	.....	
	C894	.....	CEAS470M16	
	C895	.....	CKSQYB103K50	
	C901-C904	.....	CEANP470M25	
	R888	RS1/10S103J	.....	
	R889	RS1/10S680J	.....	
	R899, R900	.....	RS1/10S102J	
	R912	.....	RD1/8PM100J	
	R913	.....	RD1/8PM470J	
	Pin jack 3P (LD)	AKB1102	AKB1137	
	Pin jack 1P (TV MONITOR)	AKB1145	.....	

10.2 PCB PARTS LIST

NOTES:

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10¹ → 561 ..... RD1/8PM□□□J
47kΩ → 47 × 10³ → 473 ..... RD1/4PS□□□J
0.5Ω → 0R5 ..... RN2H□□□K
1Ω → 010 ..... RS1P□□□K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10¹ → 5621 ..... RN1/4PC□□□□F

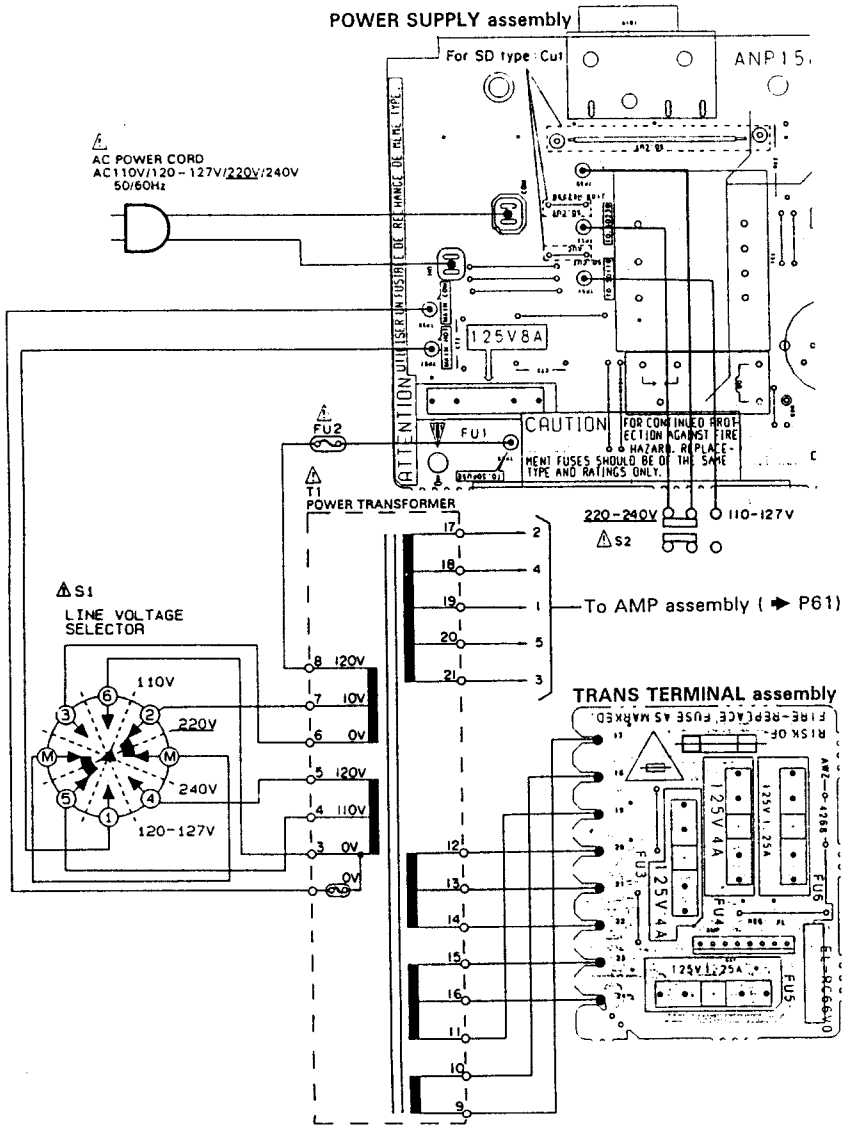
Mark No.	Description	Parts No.
PRE OUT TERMINAL ASSEMBLY		
RESISTORS		
R591–594	CARBON FILM RESISTOR	RD1/8PM□□□J
OTHERS		
CN	PIN JACK 2P	AKB1171
MR & S ASSEMBLY		
SEMICONDUCTORS		
IC1001	E-SW IC	TC9164N
IC1002	OP AMP	M5238PF
IC1003	E-VR IC	TC9176P
IC1004	OP-AMP IC	NJM4558DXP
Q97, 98	TRANSISTOR	2SC2878
Q99	TRANSISTOR	XDA124ES
CAPACITORS		
C1003, 1004	CERAMIC CAPACITOR	CKSQYB103K50
C1005, 1006	ELECT. CAPACITOR	CEAS470M16
C1007, 1008	ELECT. CAPACITOR	CEAS4R7M50
C1011–1014	ELECT. CAPACITOR	CEAS2R2M50
C1015, 1016	CERAMIC CAPACITOR	CKSQYB471K50
C1017, 1018	CHIP CAPACITOR	CCSQCH470J50
C1019, 1020	ELECT. CAPACITOR	CEAS4R7M50
RESISTORS		
R1005, 1006	CARBON FILM RESISTOR	RD1/8PM163J
R1024–1026	CARBON FILM RESISTOR	RD1/8PM102J
R97, 98	CARBON FILM RESISTOR	RD1/8PM222J
R99	CARBON FILM RESISTOR	RD1/8PM102J
Other resistors		RS1/10S□□□J

Mark No.	Description	Parts No.
OTHERS		
CN30	CONNECTOR (15P)	KPE15
CN32	CONNECTOR (15P)	KPE15
CN33	CONNECTOR (6P)	KPE6
CN34	CONNECTOR (4P)	KPE4
	PIN JACK 2P	AKB1126
OSD ASSEMBLY		
SEMICONDUCTORS		
IC1101	E-SW IC	NJM2234L
IC1102	REGULATOR IC	UPC78L05
IC1103	PORT-EXPANDER IC	M66320FP
IC1104	TV IC	UPC1377C
IC1105	OSD IC	M50554-003SP
IC1106	E-SW IC	NJM2233BS
IC1107	E-SW IC	NJM2234L
Q1101	TRANSISTOR	2SC2458
Q1102	TRANSISTOR	XDA124ES
Q1103	TRANSISTOR	XDC124ES
Q1104	TRANSISTOR	XDA124ES
Q1105, 1106	TRANSISTOR	2SC2458
Q1107, 1108	TRANSISTOR	2SC2712
Q1109	TRANSISTOR	2SA1162
D1101	DIODE (SMD)	1SS352
D1102	DIODE	HSS104-02
D1103	ZENER DIODE	RD5.1ESB
D1104	DIODE (SMD)	1SS352
COILS		
L1101	AXIAL INDUCTOR	LAU390K
L1102	AXIAL INDUCTOR	LAU150K
L1103, 1104	AXIAL INDUCTOR	LAU270K
L1105	AXIAL INDUCTOR	LAU680K

Mark No.	Description	Parts No.
CAPACITORS		
TC1101	CERAMIC TRIMMER	ACM-020
C1101, 1102	ELECT. CAPACITOR	CEAS100M50
C1103	ELECT. CAPACITOR	CEAS101M10
C1104	ELECT. CAPACITOR	CEAS101M16
C1106	CERAMIC CAPACITOR	CKSQYB103K50
C1108	ELECT. CAPACITOR	CEAS101M10
C1109	CHIP CAPACITOR	CCSQCH101J50
C1110	ELECT. CAPACITOR	CEAS100M50
C1111	CERAMIC CAPACITOR	CCSQCH560J50
C1112	ELECT. CAPACITOR	CEAS2R2M50
C1113	ELECT. CAPACITOR	CEAS101M16
C1114, 1115	ELECT. CAPACITOR	CEAS010M50
C1116	CERAMIC CAPACITOR	CCSQCH561J50
C1117	CERAMIC CAPACITOR	CKSQYB152K50
C1118	AUDIO FILM CAPACITOR	CFTXA823J50
C1119	AUDIO FILM CAPACITOR	CFTXA333J50
C1120	CERAMIC CAPACITOR	CKSQYB472K50
C1121	ELECT. CAPACITOR	CEAS010M50
C1122	AUDIO FILM CAPACITOR	CFTXA333J50
C1123	AUDIO FILM CAPACITOR	CFTXA105J50
C1124	PL.STYRENE CAPACITOR	CQSA562J50
C1125	ELECT. CAPACITOR	CEAS2R2M50
C1126	AUDIO FILM CAPACITOR	CFTXA333J50
C1127	CERAMIC CAPACITOR	CKSQYF473Z50
C1128	ELECT. CAPACITOR	CEAS101M16
C1129	AUDIO FILM CAPACITOR	CFTXA104J50
C1130	CHIP CERAMIC C.	CCSQCH220J50
C1131	ELECT. CAPACITOR	CEAS330M16
C1132	CHIP CAPACITOR	CKSQYF103Z50
C1133	CHIP CERAMIC C.	CCSQCH150J50
C1134	CHIP CAPACITOR	CCSQCH330J50
C1135	CHIP CERAMIC C.	CCSQCH150J50
C1136	CHIP CERAMIC C.	CCSQCH220J50
C1137	CHIP CAPACITOR	CKSQYF103Z50
C1138	CHIP CERAMIC C.	CCSQCH220J50
C1139	CHIP CAPACITOR	CKSQYF103Z50
C1140–1143	ELECT. CAPACITOR	CEAS100M50
C1144	ELECT. CAPACITOR	CEAS101M16
C1145	CERAMIC CAPACITOR	CKSQYB103K50
C1146, 1147	ELECT. CAPACITOR	CEAS102M6
C1148	ELECT. CAPACITOR	CEAS101M16
C1149–1151	ELECT. CAPACITOR	CEAS100M50
C1152, 1153	CHIP CAPACITOR	CCSQCH050C50
C1154	CHIP CAPACITOR	CCSQCH101J50
C1155	CHIP CAPACITOR	CKSQYB102K50
C1156	CHIP CAPACITOR	CCSQCH101J50
C1157, 1158	ELECT. CAPACITOR	CEAS101M16

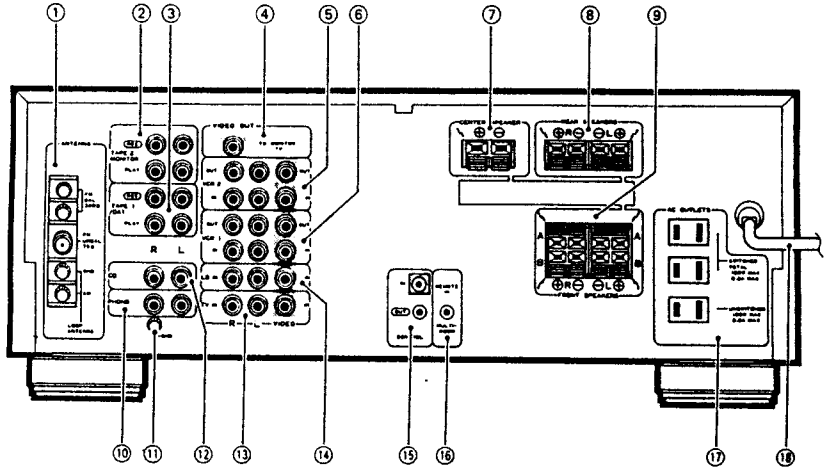
Mark No.	Description	Parts No.
RESISTORS		
VR1101	VR	VRTS6HS103
VR1102	VR	VRTS6HS472
R1101	CARBON FILM RESISTOR	RD1/4PM101J
R1102	CARBON FILM RESISTOR	RD1/4PM4R7J
R1118	METALFILM RESISTER	RN1/4PC1202F
R1127	CARBON FILM RESISTOR	RD1/4PMF100J
R1140, 1141	CARBON FILM RESISTOR	RD1/2PM221J
R1146, 1147	CARBON FILM RESISTOR	RD1/8PM102J
R1150	CARBON FILM RESISTOR	RD1/8PM103J
R1151	CARBON FILM RESISTOR	RD1/8PM104J
	Other resistors	RS1/10S□□□J
OTHERS		
CN31	CONNECTOR (9P)	KPE9
CN35	CONNECTOR (6P)	KPE6
CN	PIN JACK 2P	AKB1200
X1101	CRYSTAL RESONATOR (14.31818MHz)	ASS1056

10.3 POWER SUPPLY SECTION (FOR VSX – 501/SD)



11. PANEL FACILITIES

11.1 FOR VSX – 501 AND VSX – 511S



① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

③ TAPE 1/DAT jacks

Use these to connect the first cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

④ VIDEO OUT (TV MONITOR) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

⑤ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑥ VCR 1 jacks

[VIDEO OUT]
When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]
When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]
When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]
When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑦ CENTER SPEAKER terminals

Connect the center speaker to these terminals.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use center speakers of impedance 8 Ω–16 Ω.

⑧ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use rear speakers of impedance 8 Ω–16 Ω.

⑨ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.
B: Connect to the second set of speakers.
Speaker lead wire preparation and connection.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use speakers of impedance 8 Ω–16 Ω.

⑩ PHONO input jacks

Connect to the output cables from a turntable.

⑪ GND terminal

Connect the turntable ground lead to this terminal.

⑫ CD input jacks

Connect to the output jacks of a compact disc player.

⑬ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]
Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]
Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑭ LD jacks

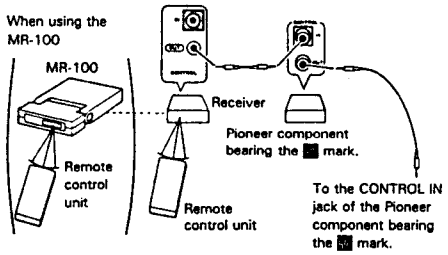
[VIDEO IN]
When watching the video image from a LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]
When playing back the audio channel from a LD player, connect its AUDIO OUTPUT jacks here.

⑮ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.
OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:
The receiver's remote sensor does not function when a plug is inserted in IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


When using the MR-100
MR-100
Receiver
Pioneer component bearing the ■ mark.
Remote control unit
Remote control unit
To the CONTROL IN jack of the Pioneer component bearing the ■ mark.

⑯ MULTI-ROOM REMOTE IN jack

Connect to the separately sold MR-100 Multi-Room remote control unit.

⑰ AC OUTLETS

[U.S. and Canadian models]

[SWITCHED TOTAL 100 W (0.8 A) MAX]
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

[UNSWITCHED 100 W (0.8 A) MAX]
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).
The equipment should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.

[Multi-voltage model]

SWITCHED TOTAL 100 W MAX
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

UNSWITCHED 100 W MAX
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

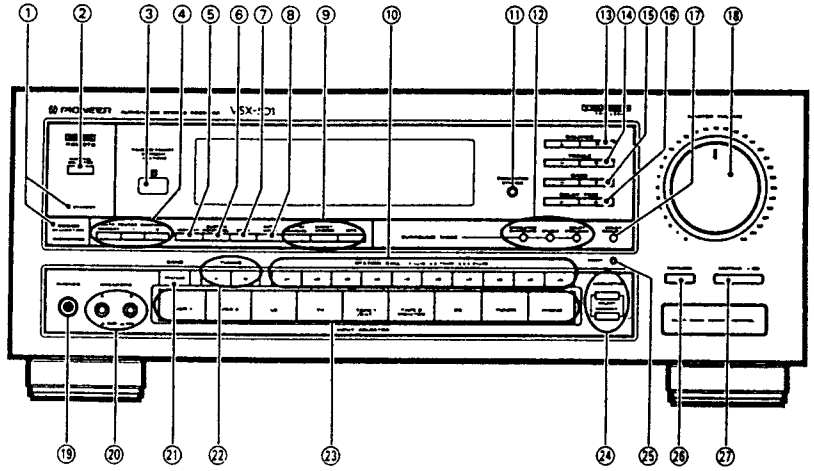
VSX-501, VSX-511S

NOTE:
- ***This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.***
- ***Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.***
  This can cause the receiver to malfunction.

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

⑱ Power cord

* Illustration shows model VSX-501.



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② V-SIGNAL (VIDEO SIGNAL) SELECTOR button

Use to change the video signal in sequence leaving the sound unchanged.

VCR 1 → VCR 2 → LD → TV → OFF

The current setting is shown by an indicator on the display section.

③ Remote sensor

④ AUTO SOURCE CONTROL buttons

1, 2 buttons:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:

Use when memorizing settings to a 1, 2 button.

⑤ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode. This button is also used for custom memory operation.

⑥ CUSTOM MEMO SEL button

Recall a genre name with this button.

ROCK → POP → JAZZ → NEWS → OTHER

⑦ SCAN button

Operate when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL buttons are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. The display section SCAN indicator will light. Press the button again and the tuner remains tuned in to the station playing when the button was pressed the second time.
Station frequencies not assigned station numbers in the memory are skipped.
When you have selected a CUSTOM MEMORY genre, memory scan is performed on the stations in that genre.

⑧ FM Mode AUTO/MONO button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:

Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This button has no effect on reception of AM broadcasts.

⑨ Tuning buttons

AUTO/MANUAL tuning selector button:

Use to select the tuning mode. To select the AUTO tuning mode, press this button to light the AUTO TUNING indicator in the display section. To select the MANUAL tuning mode, switch off the AUTO TUNING indicator.

AUTO tuning

When the − or + TUNING button is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:

Pressing the TUNING button (− or +) while scanning is taking place causes scanning to stop.

MANUAL tuning

This lets you manually tune to particular broadcast frequencies. Each press of the + or − button raises or lowers the frequency by one tuning step. For continuous scanning, keep the button pressed, then release it to stop scanning.

DIRECT ACCESS tuning button:

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.
If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low

HITS (Hyper Intelligent Tuning System) button:

Press this button, and search automatically begins up and down the frequency for stations that can be received. When a station that can be received is found, the search operation stops.

VSX-501, VSX-511S

⑩ STATION CALL buttons

Up to 30 FM or AM stations can be preset at random.
These buttons are used to preset and recall desired broadcasting stations, FM AUTO/MONO mode.

NOTE:

Pressing STATION CALL button will select TUNER as the source, regardless of what other listening source or function was selected.

⑪ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:

- *This effect is not produced through the rear speakers.*
- *Use with the SURROUND MODE in the OFF.*

⑫ SURROUND MODE selector buttons

SIMULATED SURROUND:

Select this setting when listening to music or a monaural source, etc.

STUDIO:

Select this setting to enjoy the effect of listening to music in a recording studio.

DOLBY PRO LOGIC SURROUND:

Select this setting when watching video tapes or video discs bearing the DOLBY SURROUND mark.

⑬ BALANCE buttons

Use them to adjust the sound volume balance between left and right speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
Press L and R together to bring the volume balance back to center.

NOTE:

The left-right sound volume balance cannot be adjusted on the rear speakers.

⑭ TREBLE control buttons

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (+, −) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑮ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (+, −) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑯ DELAY TIME button

Operates when the SIMULATED or DOLBY PRO LOGIC SURROUND mode is ON.
Switches to surround delay time in 8 steps. For DOLBY PRO LOGIC SURROUND, 20 ms is standard.
Changes in 2 ms steps.

16 ms ⟷ 18 ms ⟷ .....⟷ 28 ms ⟷ 30 ms

⑰ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DOLBY SURROUND mark.

⑱ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

⑲ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑳ SPEAKERS buttons (A, B) OFF ON

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard thorough the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

㉑ BAND (FM/AM) button

Use this to switch between FM and AM frequency band reception.

㉒ TUNING buttons

+ : Performs tuning from the currently displayed station frequency in ascending frequency order.
− : Performs tuning in order of descending frequencies.

㉓ INPUT SELECTOR buttons

VCR 1: Press when performing playback on a first VCR unit.
VCR 2: Press when performing playback on a second VCR unit.
LD: Press when performing playback on a LD player.
TV: Press when using a TV tuner connected to the TV jacks.
TAPE 1/DAT:
Press when performing playback on a DAT or cassette deck.
TAPE 2 MONITOR:
Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to radio broadcasts.
PHONO: Press when playing records on turntable.

㉔ ACOUSTIC buttons

MEMORY:

Pressing this button will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT:

- This button is used to preset the five acoustic memories (A—E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.

→FLAT → LOUDNESS → A → B → C → D → E →

FLAT: For flat (normal) frequency response.
LOUDNESS: Emphasizes the low- and high-frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A—E: Memorized acoustic memory settings.

㉕ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.
If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

㉖ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR ..... OFF
- SURROUND MODE ..... OFF
- MUTING ..... OFF
- BALANCE ..... CENTER
- FUNCTION ..... TUNER
- V-SIGNAL SELECTOR .... OFF
- TONE ..... flat

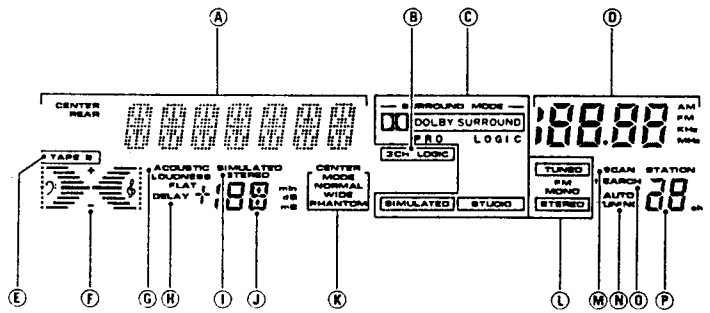
The HITS function searches for broadcast stations among the frequencies displayed.

NOTE:
If no sound is output after the RETURN button is pressed, make sure that SPEAKERS buttons are turned on.

㉗ MUTING button

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

DISPLAY SECTION



Ⓐ CHARACTER/LEVEL/BALANCE display

- This displays the name of the component selected with the INPUT SELECTOR and V-SIGNAL SELECTOR, etc.
- It also displays the level and balance settings during adjustment.

Ⓑ DOLBY 3CH LOGIC indicator

Ⓒ SURROUND MODE indicators

Ⓓ Frequency/Band display

Ⓔ TAPE 2 indicator

Lights up when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

Ⓕ TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

Ⓖ ACOUSTIC display

Ⓗ DELAY indicator

Ⓘ SIMULATED STEREO indicator

Ⓙ ACOUSTIC/DELAY TIME/LEVEL/SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.

Ⓚ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND and DOLBY 3CH LOGIC operation (Refer to page 6, 7).

Ⓛ Tuning indicators

TUNED: Lights up when a station is tuned.

FM MONO: Lights up when the FM MONO mode is selected with the FM MODE AUTO/MONO button.
STEREO: Lights up when a stereo FM broadcast is being received.

Ⓜ SCAN indicator

Lights up during memory scan operation.

Ⓝ AUTO TUNING indicator

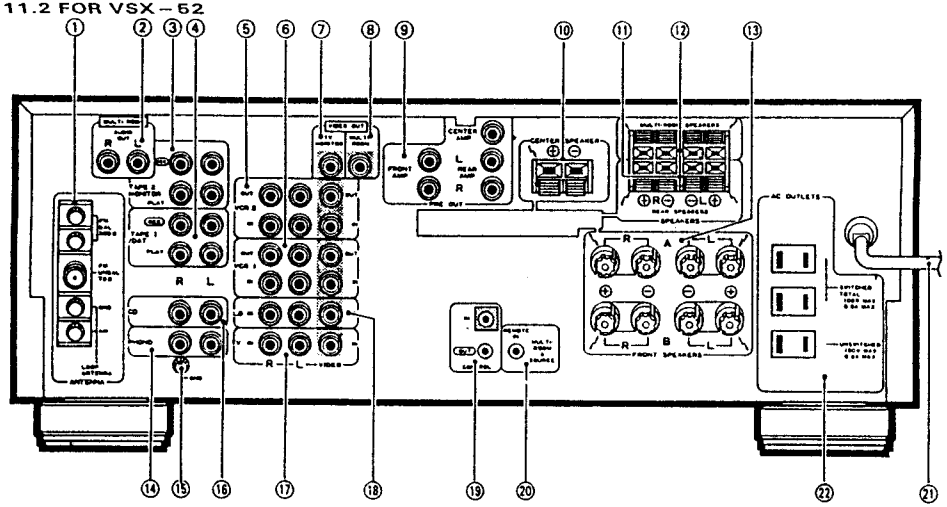
Lights up when in the auto tuning mode.

Ⓞ SEARCH indicator

Ⓟ STATION display

Indicates the channel (ch) selected with the STATION CALL buttons.

11.2 FOR VSX-52



① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

② MULTI-ROOM AUDIO OUT jacks

For a setup in which MULTI-ROOM & SOURCE is used in the Sub room while surround is used in the Main room, connect this terminal to a stereo amplifier and use speakers connected to that amplifier for reproduction in the Sub room.

③ TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

④ TAPE 1/DAT jacks

Use these to connect the first cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

⑤ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑥ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑦ VIDEO OUT (TV MONITOR) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

⑧ VIDEO OUT (MULTI-ROOM) jack

Connect the TV monitor for use in Sub room.

⑨ PRE OUT jacks

[FRONT AMP]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑩ CENTER SPEAKER terminals

Connect the center speaker to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use center speakers of impedance 8 Ω–16 Ω.

⑪ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use rear speakers of impedance 8 Ω–16 Ω.

⑫ MULTI-ROOM SPEAKERS terminals

Connect Multi-Room & Source Sub-Room speakers.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use speakers of impedance 8 Ω–16 Ω.

⑬ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.
B: Connect to the second set of speakers.

Speaker lead wire preparation and connection.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.
Use speakers of impedance 8 Ω–16 Ω.

⑭ PHONO input jacks

Connect to the output cables from a turntable.

⑮ GND terminal

Connect the turntable ground lead to this terminal.

⑯ CD input jacks

Connect to the output jacks of a compact disc player.

⑰ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑱ LD jacks

[VIDEO IN]

When watching the video image from a LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When playing back the audio channel from a LD player, connect its AUDIO OUTPUT jacks here.

⑲ CONTROL IN/OUT jacks

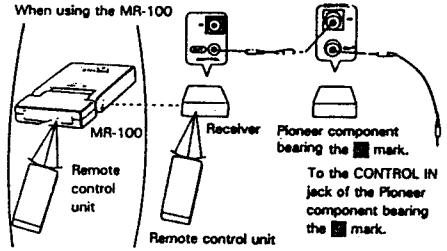
IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

OUT: Connect this jack to other Pioneer components when using the remote control of this unit to control the other components.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.

When using the MR-100


MR-100
Receiver
Pioneer component bearing the ■ mark.
Remote control unit
To the CONTROL IN jack of the Pioneer component bearing the ■ mark.
Remote control unit

⑳ MULTI-ROOM & SOURCE REMOTE IN jack

Connect to the separately sold MR-100 Multi-Room remote control unit.

㉑ Power cord

㉒ AC OUTLETS

[SWITCHED TOTAL 100 W (0.8 A) MAX]

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

[UNSWITCHED 100 W (0.8 A) MAX]

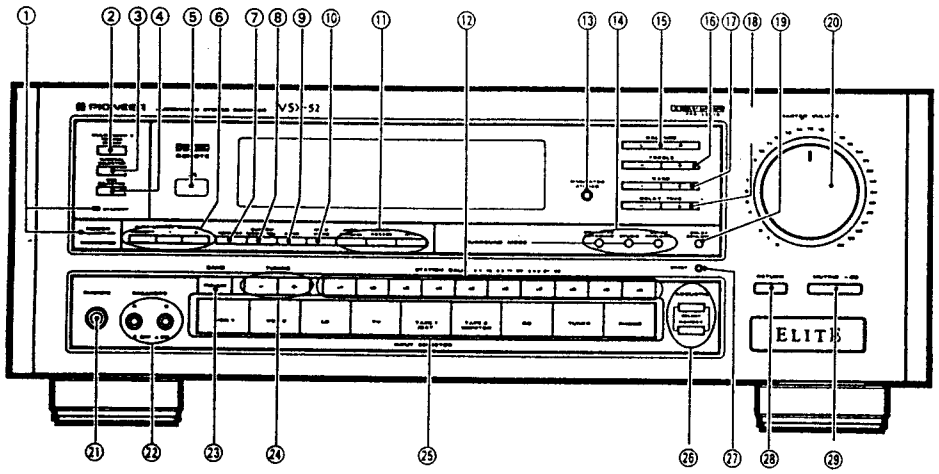
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

The equipment should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.

NOTE:

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  This can cause the receiver to malfunction.

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.



① POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]
When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

NOTE:
When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② MULTI-ROOM & SOURCE button

Use in combination with the separately sold MR-100 Multi-Room remote control unit.
When this button is on, the source selected with the input selector at that time is set as the SUB ROOM function. The selected sub-function's sound is output through MULTI-ROOM SPEAKERS, and the video signal is output through the MULTI-ROOM VIDEO OUT jack. If you install speaker systems connected to the SUB ROOM SPEAKERS terminals in a different room, you can enjoy different sources in two different rooms with a single main unit

③ V-SIGNAL (VIDEO SIGNAL) SELECTOR button

Use to change the video signal in sequence leaving the sound unchanged.

VCR 1 → VCR 2 → LD → TV → OFF

The selected setting is shown by an indicator on the display section.

④ OSD (On Screen Display) SELECTOR button

Select MAIN to send the On Screen Display to the TV monitor connected to the VIDEO OUT TV MONITOR jack or select SUB to send it to the TV monitor connected to the MULTI-ROOM VIDEO OUT jack.

⑤ Remote sensor

⑥ AUTO SOURCE CONTROL, MEMORY buttons

1, 2 buttons:
These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

MEMORY:
Use when memorizing settings to a 1, 2 button.

⑦ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode. This button is also used for custom memory operation.

⑧ CUSTOM MEMO SEL button

Recall a genre name with this button.

⑨ SCAN button

Operate when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL buttons are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. The display section SCAN indicator will light. Press the button again and the tuner remains tuned in to the station playing when the button was pressed the second time.
Station frequencies not assigned station numbers in the memory are skipped.
When you have selected a CUSTOM MEMORY genre, memory scan is performed on the stations in that genre.

⑩ FM Mode AUTO/MONO button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This button has no effect on reception of AM broadcasts.

⑪ Tuning buttons

AUTO/MANUAL tuning selector button:

Use to select the tuning mode. To select the AUTO tuning mode, press this button to light the AUTO TUNING indicator in the display section. To select the MANUAL tuning mode, switch off the AUTO TUNING indicator.

AUTO tuning
When the – or + TUNING button is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:
Pressing the TUNING button (– or +) while scanning is taking place causes scanning to stop.

MANUAL tuning
This lets you manually tune to particular broadcast frequencies. Each press of the + or – button raises or lowers the frequency by one tuning step. For continuous scanning, keep the button pressed, then release it to stop scanning.

DIRECT ACCESS tuning button:

When this button is pressed, the STATION CALL buttons function as ten-key number buttons for direct input of the desired reception frequency. Press again to cancel this mode.
If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

HITS (Hyper Intelligent Tuning System) button:

Press this button, and search automatically begins up and down the frequency for stations that can be received. When a station that can be received is found, the search operation stops.

⑫ STATION CALL buttons

Up to 30 FM or AM stations can be preset at random.
These buttons are used to preset and recall desired broadcasting stations, FM AUTO/MONO mode.

NOTE:
- *Pressing STATION CALL button will select TUNER as the source, regardless of what other listening source or function was selected.*
- *They are also used when performing direct access tuning.*

⑬ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, AM or TV broadcasts).
"SIMULATED STEREO" appears on the display section.

NOTE:
- *This effect is not produced through the rear speakers.*
- *Use with the SURROUND MODE in the OFF.*

⑭ SURROUND MODE selector buttons

SIMULATED SURROUND:
Select this setting when listening to music or a monaural source, etc.

STUDIO:
Select this setting to enjoy the effect of listening to music in a recording studio.

DOLBY PRO LOGIC SURROUND:
Select this setting when watching video tapes or video discs bearing the DOLBY SURROUND mark.

⑮ BALANCE buttons

Use them to adjust the sound volume balance between left and right speakers.
L: Press to decrease the sound on the right side.
R: Press to decrease the sound on the left side.
Press L and R together to bring the volume balance back to center.

NOTE:
The left-right sound volume balance cannot be adjusted on the rear speakers.

⑯ *TREBLE control buttons*

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (+, −) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

⑰ BASS control buttons

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the − button to decrease it.
The TONE indicator appears on the display section.
When both buttons (+, −) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑱ DELAY TIME buttons

Operates when the SIMULATED SURROUND or DOLBY PRO LOGIC SURROUND mode is ON.
Switches to surround delay time in 8 steps. For DOLBY PRO LOGIC SURROUND, 20 ms is standard.
Changes in 2 ms steps.

16 ms ⟷ 18 ms ⟷ ··· ⟷ 28 ms ⟷ 30 ms

⑲ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DOLBY SURROUND mark.

⑳ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

㉑ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

㉒ SPEAKERS buttons (A, B) ▼OFF ▲ON

ON/OFF switches for the A and B speaker systems.

NOTE:

No sound will be heard thorough the speakers when both A and B buttons are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

㉓ BAND (FM/AM) button

Use this to switch between FM and AM frequency band reception.

㉔ TUNING buttons

+ : Performs tuning from the currently displayed station frequency in ascending frequency order.
− : Performs tuning in order of descending frequencies.

㉕ INPUT SELECTOR buttons

VCR 1: Press when performing playback on a first VCR unit.
VCR 2: Press when performing playback on a second VCR unit.
LD: Press when performing playback on a LD player.
TV: Press when using a TV tuner connected to the TV jacks.
TAPE 1/DAT: Press when performing playback on a DAT or cassette deck.
TAPE 2 MONITOR: Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
CD: Press when playing compact discs on a CD player.
TUNER: Press when listening to radio broadcasts.
PHONO: Press when playing records on turntable.

㉖ ACOUSTIC buttons

MEMORY:
Pressing this button will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT:

- This button is used to preset the five acoustic memories (A – E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.

FLAT → LOUDNESS → A → B → C → D → E

FLAT: For flat (normal) frequency response.
LOUDNESS: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.
A–E: Memorized acoustic memory settings.

㉗ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.
If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

㉘ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR ..... OFF
- SURROUND MODE ..... OFF
- MUTING ..... OFF
- BALANCE ..... CENTER
- FUNCTION ..... TUNER
- V-SIGNAL SELECTOR .... OFF
- TONE ..... flat

The HITS function searches for broadcast stations among the frequencies displayed.

NOTE:

If no sound is output after the RETURN button is pressed, make sure that SPEAKERS buttons are turned on.

㉙ MUTING button

Press to temporarily cut off the sound volume. When pressed again, the sound will return to its previous level.

12. SPECIFICATIONS

Amplifier section

Continuous average power output of 100 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05 % total harmonic distortion (front).**

Continuous power output
(Rear only driven) ..... 20 W + 20 W (1 kHz, 0.8 %, 8 Ω)
(Front and center driven)
Front ..... 65 W + 65 W (1 kHz, 0.8 %, 8 Ω)
Center ..... 65 W (1 kHz, 0.8 %, 8 Ω)
Dynamic Power (2 Ω/4 Ω) ..... 230 W/220 W
Input (Sensitivity/Impedance)
PHONO MM ..... 2.5 mV/47 kΩ
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2 ..... 150 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)
PHONO MM ..... 130 mV
Frequency Response
PHONO MM ..... 20 Hz to 20,000 Hz ±0.3 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2 ..... 5 Hz to 100,000 Hz +1 −3 dB
Output (Level/Impedance)
TAPE 1/DAT REC, TAPE 2 REC ..... 150 mV/2.2 kΩ
VCR 1 OUT, VCR 2 OUT ..... 150 mV/2.2 kΩ
Tone Control
BASS ..... ±8 dB (100 Hz)
TREBLE ..... ±8 dB (10 kHz)
Loudness Contour ..... 6 dB (100 Hz)
4 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO MM ..... 75 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2 ..... 97 dB
Signal-to-Noise Ratio (EIA, at 1 W (1 kHz))
PHONO MM ..... 77 dB
CD, TAPE 1/DAT, TAPE 2, LD, VCR 1, VCR 2 ..... 80 dB

* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*
** *Measured by Audio Spectrum Analyzer.*

VIDEO Section

Input (Sensitivity/Impedance)
VCR 1, VCR 2, LD ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR 1, VCR 2, MONITOR ..... 1 Vp-p/75 Ω
Frequency Response
VCR 1, VCR 2, LD → MONITOR ..... 5 Hz – 10 MHz +1 −3 dB
Signal to Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono; 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity ..... Mono; 15.3 dBf, (1.6 μV/75 Ω)
Stereo; 37.0 dBf, (19.5 μV/75 Ω)
Signal-to-Noise Ratio ..... Mono; 80 dB (at 65 dBf)
Stereo; 76 dB (at 85 dBf)
Distortion ..... Mono; 0.2 % (1 kHz)
Stereo; 0.3 % (1 kHz)
Capture Ratio ..... 1 dB
Alternate Channel Selectivity ..... 65 dB (400 kHz)
Stereo Separation ..... 45 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (+1 −3) dB
Image Interference Ratio ..... 50 dB
IF Interference Ratio ..... 80 dB
Antenna Input ..... 300 Ω balanced
75 Ω unbalanced

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

AM Tuner Section

Frequency range
With 9 kHz step ..... 531 kHz – 1,602 kHz
With 10 kHz step ..... 530 kHz – 1,700 kHz
Sensitivity (IHF, Loop antenna) ..... 300 μV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power requirements
U.S. and Canadian models ..... AC 120 V, 60 Hz
Multi-voltage model ..... AC 110 V/120 – 127 V/220 V/240 V (Switchable), 50/60 Hz
Power consumption
U.S. and Canadian models ..... 240 W, 320 VA
Multi-voltage model ..... 610 W
In standby condition ..... 3 W
AC Outlets
U.S. and Canadian models
SWITCHED x 2 ..... TOTAL 100 W (0.8 A) MAX
UNSWITCHED x 1 ..... 100 W (0.8 A) MAX
Multi-voltage model
SWITCHED x 2 ..... TOTAL 100 W MAX
UNSWITCHED x 1 ..... 100 W MAX
Dimensions ..... 420 (W) x 162 (H) x 406 (D) mm
16-9/16 (W) x 6-3/8 (H) x 16 (D) in
Weight (without package) ..... 9.7 kg (21 lb 6 oz)

Furnished Parts

FM T-type antenna 1
AM Loop antenna 1
Dry cell batteries
VSX-511S: size "AA" (IEC LR6/AM-3) Alkaline 2
VSX-501: size "AAA" (IEC R03/UM-4) 2
Remote control unit 1
Operating instructions 1

NOTE:

Specifications and the design subject to possible modifications without notice due to improvements.

FOR VSX – 52

AM Tuner Section

Frequency range ..... 530 kHz – 1,700 kHz
Sensitivity (IHF, Loop antenna) ..... 300 μV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power requirements ..... AC 120 V, 60 Hz
Power consumption ..... 240 W
In standby condition ..... 3 W
AC Outlets
SWITCHED x 2 ..... TOTAL 100 W (0.8 A) MAX
UNSWITCHED x 1 ..... 100 W (0.8 A) MAX
Dimensions ..... 440 (W) x 162 (H) x 417 (D) mm
17-5/16 (W) x 6-3/8 (H) x 16-7/16 (D) in
Weight (without package) ..... 10.0 kg (22 lb 1 oz)

Furnished Parts

FM T-type antenna 1
AM Loop antenna 1
Size "AA" Alkaline batteries (LR6/AM-3) 2
Remote control unit 1
Operating instructions 1